

# THE NOR-WEST FARMER.

Vol. 16; No. 7.  
Whole No. 189.

WINNIPEG, MANITOBA, JULY, 1898.

\$1 a Year,  
in Advance.



## THE HORSE.

### To Horse Breeders.

Wake up, you dormant breeders,  
Who've been sleeping for past years;  
Strike out anew—the night has passed—  
The morning light appears.  
The times have changed; cash buyers  
now

### Importations of 1898.

The number of horses which have been imported into Manitoba during the present year is surprising, and shows the revival that is taking place all along the line in horse matters. The following list, while perhaps not comprising all the new arrivals, will be found accurate as far as it goes.

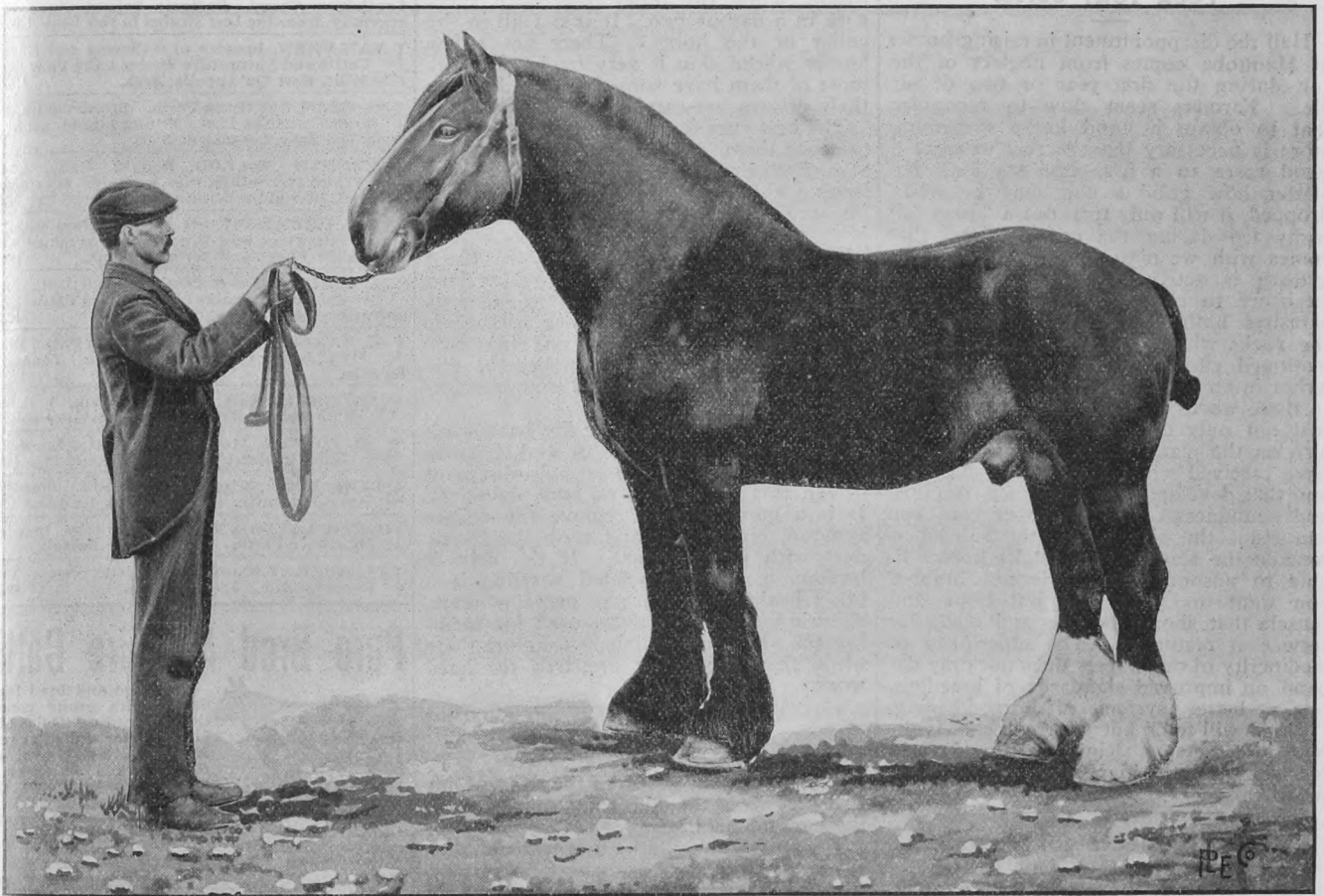
#### STANDARD BRED TROTTERS AND PACERS.

Pathmont, br. s.; record 2.09½, by Altamont, owned by Lindsay & Cowan, Killarney. We have not seen this horse, but from his breeding and performance, he is one of the fast ones, and, if he starts, should be among the leaders in the great race at the exhibition this summer. His sire, Altamont, has seven in the 15 list.

Norte, 2.08, and other good ones. His record of 2.15 was made in a winning race as a 3-year-old. Has not started yet this season, but may be distinctly "in it" when the big money is divided at the Industrial. He is a natural pacer and goes without hobbles, a beautiful individual, and should prove a great sire.

Mitchell Boy, bl. s., 2.29½, by Empire Wilkes, dam Drift, owned by T. E. Kelly, Brandon. Imported for breeding purposes, this horse has already proved himself a good sire, having three in the list. He should be a valuable addition to the sires of the province.

Clover Bud, gr. m., by Conductor, dam Racket, owned by W. Armstrong. A beautiful grey pacing mare, with a nice turn of speed, and only four years old, is one of the most promising of green ones.



Clydesdale Stallion Erskine's Lad [2015], property of John Ewen, Morden, Man., winner of first prize at Winnipeg in 1895 and 1897.

Erskine's Lad was winner of first place at Winnipeg in 1895 and also in 1897. He was not shown in 1896, and was placed second to Charming Charlie in 1894. Mr. Ewen brought him from Ont. in 1893. Erskine's Lad was bred by J. Vipond, Brooklin, Ont., and was foaled in 1890. He is of choice breeding, his sire being Erskine [1652], imported by R. Beith & Co., Bowmanville, Ont., in 1887, and his dam the imported mare, Heatherbloom [2003]. The horse is meeting with great success in his own neighborhood, and has had a heavy season this year.

Are scouring the east and west,  
Ready to lay their ducats down  
For horses of the best.  
The horse with size and action,  
Well formed, with color right,  
Is hard to find, but when he's found  
The price they will not fight.  
The scarcity of horses soon  
Will open up your eyes;  
The prices that the fine ones bring  
Will fill you with surprise.  
There's money in horse-breeding now;  
By the time your colt is five  
You'll find he's 'lasses in the jug  
And honey in the hive.—Horse World.

Ben Allie, b. g., 2.14½, by Ben Harrison, owned by John Hanbury, Brandon. This handsome gelding, a pacer, has already done some campaigning this season, having started in the free-for-all at Brandon, but, not being in condition, did not get a place. He will no doubt be heard from later.

Well Ahead, br.s., 2.14½, by Wedgwood, owned by W. Barry, Winnipeg. A handsome pacing stallion. Started in Brandon this spring, but did not get a place, no doubt because it was early in the season and the horse not yet acclimated. His time is yet to come.

Touchet, b. s., 2.15, by Altamont, dam Tecora, owned by W. Armstrong, Winnipeg. This horse is bred "in the purple," being full brother to Chehalis, 2.07½. Del

King Henry, b. g., by Gambetta, dam Vic, also owned by W. Armstrong. This is a race horse all over, beautifully gaited, requires no boots, and is green only in the technical sense, for he needs no teaching how to trot. He will finish with the best of them this summer.

Meyatte, ch. m., by Nutmeg, dam Katie F., owned by James Hall, Winnipeg. A sweet mare to look at and a pleasant driver with plenty of speed.

Iva H., ch. filly, by Woodbine, dam Lenore, foaled 1895, owned by W. Armstrong, Winnipeg. A very handsome and blood-like filly, a natural trotter, with every indication of speed.

In addition to the above, we briefly enumerate the following horses new to the province or the race track:—

J. E. Marples, Deleau:—"I enclose \$1 for renewal with best wishes for your so ably conducted paper."

Islander, b. s., 2.17½, owned by J. S. McLeod, Ninga.

Nathan P., b. g., 2.19½, owned by J. McLaren, Winnipeg.

Bessie Trego, 2.26, owned by W. Fares, Winnipeg.

Monarch, blk. g., 2.32, by Superior, owned by — McMillan, Gladstone.

Lady Bird, ch. m., by Egmont, owned by S. Knight, Winnipeg.

Minnie Mc., b. m., owned by J. Chessney, Cypress River.

Free Cuba, br. g., owned by W. Richardson, Brandon.

McKinley, b.g., owned by Martin Kelly, Winnipeg.

Mollie May, ch. m., owned by J. Gaudin, Napinka.

Lillie May, b. m., owned by Robert Vance, Elsa.

Lucy G., g. m., owned by R. Willis, Boissevain.

Lady Alexander, b. m., owned by Huston Bros., Virden.

### Feed Your Colts.

Half the disappointment in raising horses in Manitoba comes from neglect of the colt during the first year or two of his life. Farmers seem slow to recognize that to obtain a good horse something more is necessary than merely to mate a good mare to a first-class stallion. No matter how good a colt may be when dropped, it will only turn out a "plug" if badly fed during the critical time that comes with weaning and continues while growth is active. Insufficient food and exposure to cold and to the attacks of parasites both external and internal are the rocks which will wreck the best intentioned efforts in horse breeding. A writer in an exchange sums up the matter in these words:—"The quality of an animal not only depends on the blood but also on the management and feed it may have received while growing to maturity, and that develops size, substance, stamina, and soundness. By improper care you can stunt the size, check the substance, weaken the stamina, and make horses liable to unsoundness. It is not blubber you want for your feed but bone and muscle that should be ripe and ready for service at maturity. The superiority or mediocrity of our horses does not only depend on improved standards of breeding, but a better system of horse-keeping. "Blood will tell," but generous care is the best interpreter. Right bred and right fed will catch the high dollar now and tomorrow."

### Bright Prospects for Breeders.

In confirmation of our recently expressed views as to the coming shortage of horses, we are glad to quote the opinion of one so well qualified to form a correct judgment on all the circumstances as Mr. F. J. Berry, the well-known auctioneer, of Chicago. He says: "There is no question but that there is going to be a great shortage in the supply of horses for a few years to come. There has hardly been any colts raised since 1894, and we have not begun to feel the effect of these short crops of colts as we will in a few years more. We believe the best quality of heavy draft horses in one or two years will be as high as they ever were. There is a great export demand upon us, and it is increasing every day as business increases and it will not be long before this class of horses will be extremely high. The horse business has a grand future, and we believe there never was a time when it offered so great inducements for breeding and raising good horses as at the present time. The scarcity of good horses and the strong demand both foreign and domestic surely means high prices and a

stronger demand than ever was known before."—Breeder's Gazette.

### Sore Shoulders.

If farmers and teamsters would learn a lesson from their own hands there would be far fewer sore shoulders seen on horses. It is easy for a man who has done no manual labor to blister his hands with a fork, or shovel, or a scythe. It is just as easy to prevent this by gradually seasoning the hands in advance. The horses that have been idle all winter, or that have not had a collar on for some weeks in the summer time, should be set to work gradually. Carelessness is the cause of most of the cases of sore shoulders. The trouble lies more in the driver than in the collar or the harness or the horse. Two men will take the same team and harness and work them in the same field at the same kind of work, the one will do even more work than the other and still keep the shoulders of the horses sound, while the other will have them sore in a day or two. It is not all in the collar or the horse. There are a few horses whose skin is very tender, but the most of them have sore shoulders because their drivers are careless and thoughtless.

The best cure for sore shoulders is never to cause them. A man whose horses have sore shoulders wants looking after. Sometimes a change of drivers is the best cure for sore shoulders. The first thing to do is to see that the collars fit comfortably. Then keep them clean and smooth. Keep the traces even, so that each shoulder does its fair share of the work. Keep the lines so fixed that the horses work with their heads straight in front, not on one side. It is little things like this that makes the difference between a good and a poor teamster.

Season the horses before the hard work begins, then, with collars and harness properly adjusted, and a careful, observant driver, there should be no sore shoulders. It is a good plan to remove the collars at noon, clean them and wash the shoulders with clean water. If the skin is broken, a little carbolated vaseline is a good healing remedy and prevents scars. A little alum in the water used for washing the shoulders will help toughen them while they are being prepared for hard work.

### Care of the Horse.

The veterinary editor of the Mark Lane Express gives the following points about the care of a horse:—

"The animals should be first watered, then fed, and while they are eating their corn the bed is turned up, the stalls mucked out, the feet picked out with the picker, and the soles, frogs and walls well washed with the water brush, the shoes being examined to see that they are firm and serviceable. Thorough grooming with brush, curry-comb, sponge and linen rubber.

"Sick and idle horses require grooming as much as working animals do to keep them in health. If horses got more efficient grooming there would be fewer complaints as to 'surfeit,' pimples, blotches, hidebound, roughness and other things that affect the health and spoil the appearance of the animal, and there would also be less demand for alterative and 'condition' powders, which are generally rendered necessary through the skin becoming unhealthy owing to its neglected condition."

The cleaning out of the foot is an important point that is entirely neglected with most of our farm horses. Of course, when out at pasture it is not necessary, but where horses are in the stable continuously the feet should be looked after better than they usually are.

## BREEDERS' DIRECTORY

CARDS under this head inserted at the rate of \$1.50 per line per year. No card accepted under two lines, nor for less than six months.

W. S. LISTER, Middle Church, near Winnipeg, Man., Breeder and Importer of Shorthorn Cattle. Stock always on hand of the best quality of most popular strains of breeding. Parties wishing to see stock met at Winnipeg on receipt of telephone message or telegraph.

WALTER LYNCH, Breeder of Shorthorn Cattle, Post Office and Railway Station, Westborough, Manitoba. This herd has competed sixteen times in fifteen years with both imported and home bred cattle and has won fifteen 1st and one 2nd, herd prizes.

J. F. HINDMARCH, Cannington Manor, Assiniboia, Man., Importer of Holstein Cattle. Young Bulls and Heifers in calf for sale: sired by a son of Jewell's her butter record is 27 lbs. 13 oz. in 7 days, and low. Terms reasonable.

SAMUEL McCURDY, Carberry, Man. No Indian Cornish Games nor Golden Spaniards left for sale, but a few extra fine Shropshire Spangled Hamburgs, Black Breasted Red Game and Pitt Games left yet.

D. FRASER & SONS, Emerson, Man. Breeders and Importers of Shorthorns, Shropshire, Southdown Sheep. Pedigree Poland China Pigs, specialty, from the best strains in the United States.

J. VAN VEEN, breeder of Galloway and Hereford Cattle and Shropshire Sheep, Lake View Ranch, File Hills, Fort Qu'Appelle, Assa.

JAS. BRAY, Oak Grove Farm. Breeder of improved large Yorkshire Pigs. Young Pigs for sale, address Jas. Bray, Longburn, Man.

KENNETH McLEOD, Dugald, Man. Chester White and Suffolk Pigs for sale. Mystock prize winners at the Winnipeg Industrial Exhibition.

W. C. EDWARDS & CO., North Nation Mills, P. Importers and Breeders of Ayrshire Cattle, Shropshire Sheep and Berkshire Pigs.

W. C. EDWARDS & CO., Rockland, Ont., Importers and Breeders of Shorthorn Cattle, Shropshire Sheep and Berkshire Pigs.

J. E. MARPLES, Poplar Grove Stock Farm, Deale, Man., breeder of Hereford Cattle. Young Bulls for sale.

W. M. CHALMERS, Hayfield, Man., breeder of Shorthorn Cattle. Correspondence solicited.

A. B. POTTER, Montgomery, Assa. Breeder and Dealer in Holsteins and Yorkshire Pigs.

STEEL BROS., Glenboro, Manitoba. Breeders of Ayrshire Cattle. Young Stock for sale.

JOSEPH TAYLOR, Fairfax, Manitoba, breeder of Shorthorn Cattle. Young stock for sale.

JAS. MURRAY, Breeder of Leicester Sheep. Young Rams for sale. Lyleton, Man.

## Pure Bred Ayrshire Cattle.

Imported and bred for the dairy, with grand constitution. Leading Gold Medal Milk, Butter and prize record. Ayrshires, Scotland and America. Importer and breeder choice Collie Dogs. Stock, all ages, for sale. Member of Dominion Cattle Breeders' Association, and purchasers dealing with me secure special low rate.

1876 R. G. STEACY, Box 720, BROCKVILLE, ONT.

## Plymouth Rocks.

The Plymouth Rock, the farmer's fowl, is our specialty, none but one breed kept. Freedom of farm should ensure a good hatch. We recently brought from Ontario a beautiful pair of cockerels, large, well marked fellows. These, mated to our choicely bred young hens and pullets, should give fine results. Eggs carefully packed and delivered at Carman, C. P. R., or Roland, N.P.R., for \$1.50 per setting of 14, two settings, \$2.50. We have a few Yorkshire Pigs, fall fitters, both sexes, for sale. Orders are coming in for spring pigs of both Yorkshires and Berkshires.

A. GRAHAM, Forest Home Farm, Pomeroy, Man.

ASK YOUR DEALER FOR

# Rice's Pure Salt

BEST FORTABLE DAIRY AND FARM.



## Feeding the Mare and Colt.

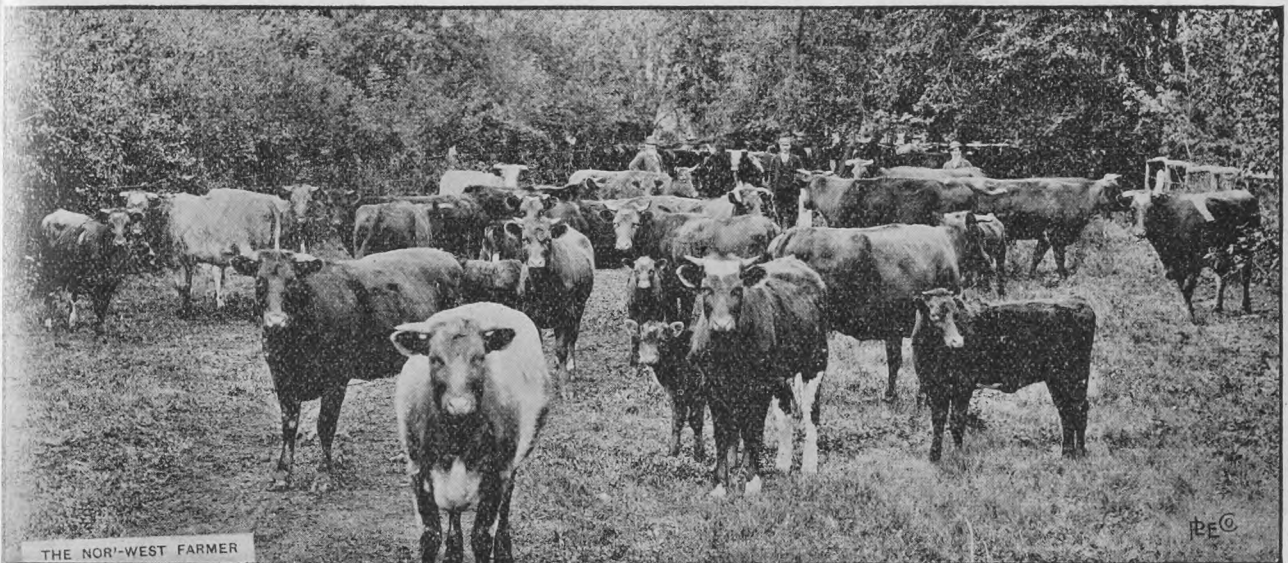
The Horseman reports the following experiment:—Three mares were fed heavily, and the colts fed nothing but grass. The mares got three times each day a plentiful ration of oats, bran, cut hay, and sometimes roots moistened and fed warm two out of three times per diem. Three other mares got nothing at all but the grass they picked, but their colts were fed as the mares described above. Another lot of four mares were fed about half as much as the first three, and their colts were given just the same feed as those in the second lot; another lot of two mares and their colts were run together in a field by themselves, getting no other food of any kind. All drank from the same pure water supply. When it came time to compare results in the late autumn, the two colts which got no feed themselves, and whose dams got no feed, were the poorest in point of growth and condition. The four that were fed, and whose dams were fed, were quite a bit the best, and the colts that were fed, but whose mothers were not, were better than the colts that were not fed, but whose dams were given grain three times per

field Park, in the same city, there is a mile track, where those who think they can dust everything that comes along, can try a brush to their heart's content. The safety of the general public forbids racing in parks and on boulevards, but it must be very pleasing to lovers of light harness horses to have special places made for them where they may try the mettle of their horses without danger to the public. New York and Philadelphia are also building similar tracks.

The revival of horse breeding this spring has found the country short of good suitable stallions. Every man who has a stallion on the road reports a good season so far. There are not enough horses to meet the demand. While this is true of Canada, it is also equally true of the United States, where there are not enough stallions to go around. The result has been a demand upon the studs of Britain, Germany, France and Belgium. But the breeders there have felt the revival of good times and have materially advanced the prices of their horses, so that it is altogether likely that stallion fees next year will be higher than they are at present.

Mr. Brown arranged with Mr. Davidson, while in Ontario in March, to find him a buyer. This team is just 4 years old, and was shown in 1895, 1896, 1897, and at the Toronto horse show in 1898. They have been shown each year at Toronto, Montreal, Ottawa, and several smaller fairs, and, with three exceptions, they won first prize and several times sweepstakes; once they won a gold medal. They always competed separately, one in the imported class, the other in the Canadian draft class. Their winnings at the Toronto horse show this spring amounted to \$100. Mr. McKenzie paid the handsome sum of \$700 for them, but they are well worth the money. F. W. Brown has also secured a Shorthorn cow and heifer from the Davidson herd. This stock will likely make an addition to the summer fairs.

John Harvey, Maple Creek:—“The Nor'-West Farmer is away ahead of any publication of the kind I have ever seen in Canada, and every month's issue is worth many times more than the whole year's subscription.”



Group of Pure Bred Shorthorn Cattle, the property of Walter Lynch, Westbourne, Man.

day. That teaches that it is best to feed both the mares and colts something extra in summer. The extra feed given the mares makes the milk more nutritious and plentiful.

The date of the Neepawa race meeting has been arranged to follow immediately after the Brandon summer exhibition. Good purses will be offered in the five events—two running and three trotting—and it is probable the best horses in the west will go to the Neepawa meeting.

Galtee More, winner of the English Derby of 1897, has been sold to the Russian government for \$100,000. This is the largest price ever paid in Britain for a blood-horse. It will be remembered that a “fake” report was published in this country shortly after the Derby that the horse had been bought by Marcus Daly at the price now reported to have been paid for him. Galtee More is a great horse, and with good luck the Russians may be able to get back the price out of him, large as it is.

Washington Park, Chicago, has a half-mile straightaway track, kept in fine order for the exclusive use of the light harness brigade for speeding purposes. At Gar-

As the bicycle increases in popularity, it increases the demand for horses. Thousands of people who have had a wheel for a year or two get a horse and buggy as the natural advance, since our horses and buggies are so cheap. They are within the reach of all, and there are many more horses in cities and towns than when street cars were drawn by horses. Horseback riding is also becoming more popular in this country as in England. A riding school teacher says: “Thousands of people took to riding exercise through the bicycle who might never have taken any exercise at all, or who fought shy of a horse, perhaps, through nervousness. A bicycle is an excellent preliminary to the horse. Bicycle riding induces confidence and dispels nervousness, and these are two effects which go to make capital horsemanship.”

One of the most successful prize-winning teams of Clydesdale mares in Canada arrived at Portage la Prairie on June 17th. They were bred and raised by James I. Davidson, Balsam, Ont., one of the best known and most successful breeders of Clydesdale horses and Shorthorn cattle in Ontario. They were sold by F. W. Brown, of Portage la Prairie, to James McKenzie, M. P. P., of Burnside.

## CATTLE.

### Stamina in Live Stock.

The world is moving. Progress is being made all along the line. Men are rising on the stepping stones of the dead mistakes of the past in breeding live stock as in other lines of work. In the days that are at hand, therefore, it is legitimate to expect a more perfect average animal in all the lines of breeding than the world has yet seen.

In the improvement of live stock many changes have been made, and some of them of great significance. Prof. Thos. Shaw, in the Breeder's Gazette, says:—The meat-making animals of to-day stand in strange contrast to the meat-makers of two or three centuries ago, and the same is true of the average dairy cow. The new and improved breeds of American swine are a wonderful advance in comparison with the razor-backs of a hundred years ago. But there is one respect in which there has been retrogression all along the line. We have good reasons for the belief that the average improved animal of to-day will not compare in stamina

with the average animal of former centuries. While breeders have improved the form and the character of the digestion they have paid all too little attention to the improvement of the lung power and the action of the heart. There is no denying it; the average of the improved herds and flocks of to-day are delicate. In some instances they are held firmly in the grip of weakness; hence they go out into the land not to effect improvement but to transmit inherent weakness. Take, for instance, the average Shorthorn of to-day. In comparison with the average grade it is delicate. Take the average dairy herd of pure-bred cows and it is in many instances seething with tuberculosis. Take the average Poland-China and with all its excellence in feeding qualities, its breeding qualities, its bone, and its all-round stamina are not equal to those of its ancestors half a century ago. The bugler of the vast army of improvers of live stock, therefore, should blow a loud blast that will call a halt in some of the methods practiced by breeders of pure-breds the world over. Two or three leaves they must tear out of the book of past practices and they must begin again. One of these is the leaf of in-and-in breeding, a second is the leaf of selection, and a third is the leaf of environment.

Take first the leaf of in-and-in breeding and give it a savage tear. True in-and-in breeding may be used as a short cut to improvement when breeds are being evolved. It may be given a place temporarily now and then in the practice of wise breeders, but the average breeder of pure-breds has no business to tamper with it. Its effects when long continued are only baneful with both animals and men. Take the lordly high-caste families of Shorthorns, for instance, that were so much in demand fifty years ago. Where are they now? They have been pushed almost entirely out of the show-rings. They lie in scores in graves dug by tuberculosis. They live mainly in the flickering, waning glory of a departed past. By in-and-in breeding men quickly brought their herds and flocks to the front, but let it be noticed the early periods in the history of such herds and flocks were the most radiant, and at length there came a time, and usually in the life of the improver, when the average of the herd or flock was something less than in the former years. Is that not true even of the famous Sittytown herd of Shorthorns, which was less inbred than the herds of other renowned and earlier improvers?

Take next the leaf of selection. Cut it out and supply it with another. In the past selection based upon performance in the ancestry for several generations back has been given first place in the creed of all improvers. It should not be so unless accompanied by strong evidence of vigor such performance in the ancestry is accented in the animal selected. No matter what the performance of the ancestry has been if the individual is a weakling. And that performance may have helped to make it so, as, for instance, when it has come by direct descent from a short and brilliant line of prize-winners whose stamina has been consumed by unnatural forcing in food and environment of a character calculated to weaken. In selection, therefore, place stamina first and not last. Do not be dazzled by the brilliant record of a near ancestry that has helped to make a weakling of the progeny. I would not be misunderstood. I am not urging that performance in the ancestry is to be ignored. It is of great account, but only when accompanied by individual vigor in the progeny. Of what avail will renown in the ancestry prove in a young bull reeking with tuberculosis?

And take that other leaf environment. It is filled with mistakes. Tear it out and supplant it with another on which are

written only correct practices. Three or four years ago the writer had a tussle with your paper over the degree of the confinement to which dairy cows might be subjected. It was a rough-and-tumble tussle, and I suppose both parties were conceited enough to claim the advantage. Well, I have this to say, that I now believe, while I had the best of the argument at the time, your contention was based on the sounder practice. It is only fair to admit that since that time I have veered more and more in the direction of giving stamina first place in our live stock breeding; that is to say, I have veered more and more in the direction of what you then contended for. But in seeking stamina by proper environment let us not go to the extreme of undue exposure. We do not need to expose our animals without food to the rigors of the range to make them hardy. In referring to range exposures a brilliant ranchman said not long since that he had seen cattle "suffer more in a Canadian barnyard in winter than those on the range." There is one thing about that statement that staggers me. It was a canny Scotchman who made it—a man who all his life has been noted for truth-telling. No, breeders, do not seek that kind of environment to make cattle hardy.

We have reached an era in live stock breeding. We do well to heed that it is so. For good, all-round useful males of the beef and mutton classes there will undoubtedly be a good demand for years to come. This demand is going to set men breeding them. May the work be properly begun. Let it be placed on a proper basis. Men who begin breeding cattle now have no business to begin on foundation animals that have not been tested, and those who are now breeding are not justified in bringing into the herd a bull that has not been tested for tuberculosis. Not a few of our pure-bred herds are so contaminated with this deceitful disease that to choose sires from them without testing them would be suicidal to the interests of the individual who made such a choice.

Correct type is a grand thing in breeding animals. But if type is carried to the extreme of bringing along with it delicacy it is overdone. The sharp crops and the spare form in the dairy cow are very good in their place, but if they are sought so far as to unduly contract the chest let us have a little less of them. The compact form and easy-keeping qualities in the improved hog are certainly desirable, but if we get these so perfected as to impair breeding qualities and weaken locomotion let us have a hog a little longer in body, though it should take a little more food. The broad, deep and thick body in the beef animal is good, but if we secure it to the extent of gendering sluggishness let us call a halt in this direction.

The opinion is common that pure-bred animals are less vigorous than grades, and it is just. But it should be remembered that it is defective breeding and management that have made them so. Stamina may be improved quite as much as form and performance; but in the improvement of the past this fact has been in a great measure lost sight of. In the reconstruction of the good ship of improved livestock breeding let stamina be the frame-

work make all the bolts of stamina, christen the vessel Stamina, and let "Stamina" be painted in brilliant letters on the side of the ship. Thus reconstructed this good ship will bring her cargo straight away into the harbor of success.

## JERSEY BULLS FOR SALE

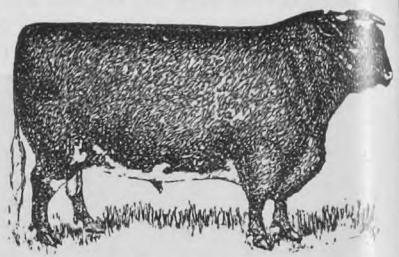
I am now offering my stock Bull, **BELVEDERE STOKES POGIS**, for sale, because his heifers are now coming to him. He is a sure good breeder. Also the following young bulls of his breeding: One three year old, one two year old, two yearlings, one bull calf. The dams of the young bulls are, Maggie Messena, a granddaughter of Mrs. Jones' celebrated Messena, and Signal Hilda, winner of two first prizes at Winnipeg. She is a model Jersey cow. Come and see my stock at Winnipeg Exhibitions or address—



**WM. MURRAY, Dugald, Man.**

2340

## J. E. SMITH, BRANDON



J. E. Smith has for sale 30 Clydesdale Stallions and Mares, many of them prize winners at Winnipeg Industrial; 35 Shorthorn Bulls, 70 Shorthorn Cows and Heifers, 20 Hereford Bulls, 60 Hereford Cows and Heifers. All animals registered in their respective books. Prices right. Come and see them. N. reserves. **J. E. SMITH, Brandon, Man.** P.O. Box 74, 2202

## Exhibition Hogs for Sale.



Having decided not to exhibit at the Winnipeg Industrial this year, I now offer at reasonable prices the following stock which I had selected for the Exhibition:—Sow, under one year, due to farrow in August; Boar, under one year, a good one; three Boars and Sow under four months that I have been fitting to show as a litter, with brood Sow; one Boar, under six months, a grand one; one Sow, under six months. These are particularly fine stock. I have also a few other good thrifty spring Pigs for sale, eight litters, due in August, which will be sold at reasonable prices. Correspondence solicited. 2252 Address—**J. A. MCGILL, NEPEAWA, MAN.**

## PLAIN VIEW STOCK FARM

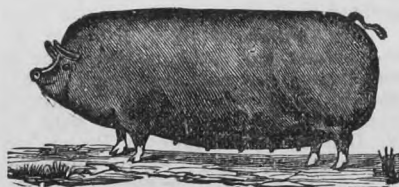
PORTAGE LA PRAIRIE, MAN.



Shorthorns, Cotswolds and Berkshire Boars for service. Sows in farrow, spring litters ready to ship bred from the greatest prize-winning herd in Manitoba or the West. English imported and Canadian bred dams and sires. 30 head fitting for July fairs, all A1, headed by Tippecanoe, Bartol Duke and Western Boy. 2184

**F. W. BROWN, Proprietor.**

## MAPLE LODGE STOCK FARM.



## LARGE ENGLISH BERKSHIRES

WILL BE SHOWN AT THE

Winnipeg and Brandon Exhibitions.

Our herd will be represented by choice selections of prize-winning animals of the best strains of the breed. Large English Berkshires of the correct bacon type, easy to feed and quick to sell. Come and see our stock.

**R. MCKENZIE, HIGH BLUFF, MAN.**



## Unfair Treatment of our Pure Bred Cattle by the United States.

Just now, when effort is being put forth to develop friendly relations between the two English-speaking nations of the world, would be a good time for the United States government to do an act that would have far more effect along this line upon the farmers of Canada than all the flag-twining and speechifying put together. We have reference to the customs regulations in regard to the entry of pure bred stock from Canada into the United States.

Some time ago, through the efforts of the Live Stock Association, the quarantine regulations were relaxed. Since then there has been quite a traffic both ways in pure bred stock across the lines. But this traffic, mutually beneficial, has been hampered in one direction and many annoying delays caused by the American customs regulations. Animals registered in American records can enter Canada free of duty, and do not need to be recorded in Canadian records before doing so. Ani-

cause the secretary was apparently very slow in recording the animals.

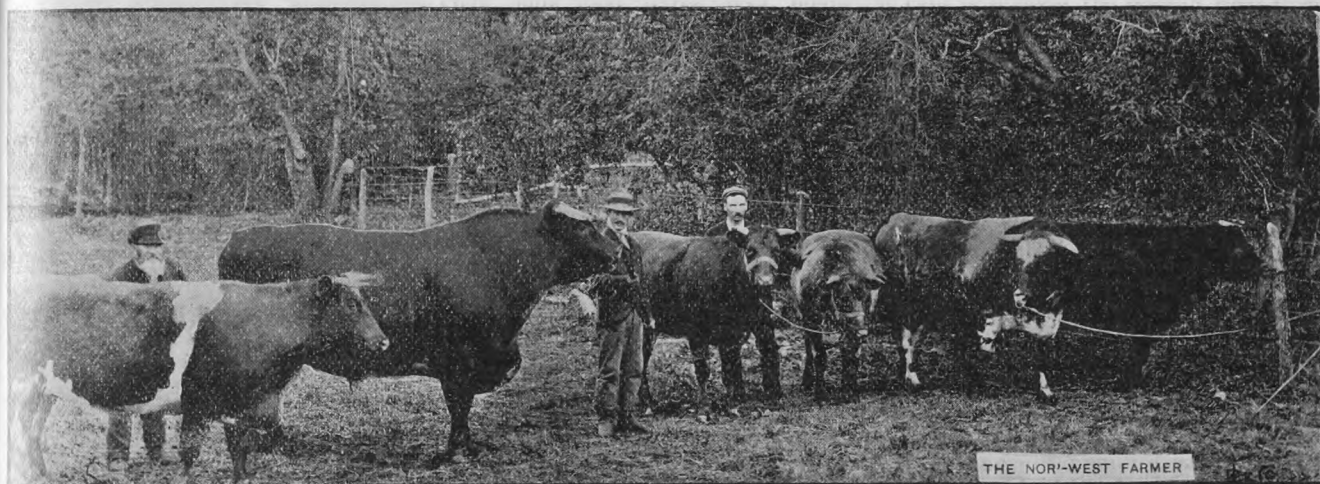
We feel sure that the existing state of affairs cannot be satisfactory to fair minded breeders on the other side of the line, for they are the ones most affected by this unjust regulation. In fact, from conversation with breeders on both sides of the line, the opinion seems to be general that this rule of the customs regulation emanated from a small circle of men who have a political pull at Washington and who are interested in certain record books. Many of these records are owned and controlled by a joint stock company, the directors of which are looking out for number one rather than for the good of the stockmen.

The stockmen of Canada do not ask that the American record associations be compelled to accept Canadian certificates if they don't want to. The breeders of Canada do ask, however, that the American government change the present unfair regulation, and accept a certificate of registry in a Canadian record as ample grounds for the admission of pure bred stock into the United States. This is only asking what Canada has all along accord-

too thin to adhere well use more coal tar. Carbolic acid will cost 50 or 60 cents in crystals by the pound, and every farmer should always keep it on hand, as it, in its many uses, is indispensable. This remedy is equally effective as a lice exterminator on poultry, and is used simply by painting the sides of the henry and roosts and dropping boards with the liquid. For young chickens saturate a piece of cloth and place in the bottom of a box, and place the mother and young chickens in the box for an hour or so. This recipe is equal to any preparation in the market.

## Dehorning Calves.

The best time to dehorn animals is while they are still calves or when they are three years old and upwards. The worst possible age is from yearlings to two-year-olds, because the horns are then very full of blood and sometimes bleed very freely. The older the animal the less the danger. If the horns are to come off, the best plan is to take them off while



Group of Shorthorn Cattle, the property of Walter Lynch, Westbourne, Man.

The red bull is Village Hero who now weighs over 2700 lbs. The roan bull is What For No, third in the yearling class in 1897 at Winnipeg. The two heifer calves are Tiny 2nd and Imogene 2nd, winners at Winnipeg last year.

mals going from Canada to the United States, however, have to be recorded in an American record before they will be allowed to enter the country free of duty. This we say is decidedly unfair treatment.

Our records have a standard as high, and in some cases higher, than American ones. Most of the American record associations are accepting registry in Canadian records of the same breed without further inquiry. In view of this, it is manifestly unfair to compel a man to register his animals before he can enter them free of duty. It sometimes entails a heavy expenditure to register the ancestors of an animal away back to imported stock, not to say anything about the long delays that are often caused in getting animals recorded. When a breeder comes over to Canada to purchase stock he wants to get them right home with him. This he cannot do if they are not recorded in an American record. He can get them through by paying the duty, as on ordinary stock, and have his money returned when he shows proof of registry inside of six months. But this is only another vexatious delay. We know of two cases that have come under The Farmer's notice recently, where animals were delayed in shipment for weeks be-

ed to American stock coming into Canada.

A committee has been appointed by the live stock associations to look into this matter, and we would respectfully suggest that our Dominion Minister of Agriculture lay this matter before the gentlemen who are to represent Canada in the coming conference on international differences and thus make an effectual effort to have this hamper to free exchange of breeding stock removed.

## Remedy for Flies on Cattle.

Take coal tar two parts and coal oil and grease one part each and mix with a small amount of carbolic acid. Apply with a cloth by moistening the hair and horns of the animal with the liquid. In the application include feet and legs, and it will drive every fly away, and one application will last ten days or more in dry weather. Apply as often as necessary and your cows will be entirely secure from flies of all kinds. Any kind of old lard or grease can be used. Coal tar is the base of this remedy and when too thick to spread well use more coal oil: when

the animal is still a calf. It is poor policy to let them grow, then cut them off. Take them off with caustic potash or some one of the liquid dehorners. A few cents worth of caustic potash in the stick will do the work very well. When the calf is about two weeks old clip away the hair over the horn button, secure the calf and rub the button until it burns well. In two weeks examine the places; if any gristle grows out cut it off or pull it out. Care should be taken to see that none of the caustic or of the liquid dehorners runs down into the eyes of the animal.

An old stockman recommends strong coffee for calves that have the scours. He mixes from a pint to a quart of strong coffee, according to the severity of the case, in the calf's milk, reducing the amount of milk by the amount of coffee added. It is mixed in each feed until the trouble is cured. By experience he has found it best to look for the root of the matter. There is some cause, find it and correct it.

E. F. W. Hysop, Killarney:—"Your premium 'Manning's Stock Book,' has come safely to hand. Am much pleased with same."

### What is Your Aim ?

Every farmer should breed with some definite aim in view. Man was given dominion over the creatures of the earth, and if he will but make use of the known laws of breeding, he will find that the animals on the farm are, as it were, only so much clay in his hands to mould and shape into the form which he desires them to assume. All successful breeders have had a definite aim for which they worked. Just as the painter or sculptor has a model which he faithfully copies, so must the breeder have in his mind's eye a model, a perfect animal. Without such a model, such an ideal, diligently copied in the selections of stock, in all matings, in fact, all along the line of breeding, no degree of success can possibly be obtained.

If the appearance of the great majority of the herds and flocks throughout the country is a reflection of the ideals of their owners, then the conclusion is inevitable that these ideals are exceedingly low. So low, in fact, that one must necessarily fall back on the thought that there is no aim, no purpose in the breeding followed, no selection of the females made, and that all females are mated to the same male without any thought of the suitability or adaptability of the resulting progeny to the business of the farm.

What is your aim, reader? Have you any? Are you honestly trying to build up in your herd those qualities and abilities which make for the highest production of either beef or milk; or are you simply mating your animals year after year with the best male attainable (and often, not even that), without any definite aim ahead of you? There are far too many of this kind of breeders. They accomplish nothing. Their stock is not one bit better at the end of ten years work, nor will it be at the end of twenty.

Have an aim, whether for beef or milk, alone, or the two combined, and then work for this year in and year out. Don't forget it, no, never. Some men have a hobby for what they call cross-breeding, although it is no such thing. For instance, a man has a herd of grade Shorthorn cattle; these are mated with a Jersey bull. By this means he thinks he will secure the proverbial richness of the Jersey in the milk of the progeny when they become cows. When the progeny are old enough to be bred, they are mated with a Holstein, the object being now to secure quantity as well as quality. The result is nothing, and so it will always be where the blood of different breeds is indiscriminately mixed. A few extra good animals may be occasionally produced in this way, but the great majority will be very inferior. The man who pursues such a plan is following a will-o-the-wisp.

Every farmer should carefully study the conditions of his farm and market situation, then choose that style or breed of animal which will best meet his particular requirements, then keep close to that line. If the production of beef is the line chosen, and a Shorthorn bull is used to improve the herd, always use a Shorthorn bull, and the very best one that is to be got. If another breed is chosen, always use a bull of the breed chosen. By so doing, the good qualities of the breed chosen can be engrafted on the herd, but not otherwise. If, however, a bull of one breed is used this year, then one of another breed next year, and so on, no progress can be made. The greatest measure of success will follow very careful selection and mating. Here is where a man's ability to develop his ideal will show itself. If beef production is the object sought, those animals that lay on a wealth of flesh in the most valuable parts and that mature early will be the ones chosen.

But there are degrees in this ability to lay on flesh in the most valuable parts which must be studied out by the breeder himself. If the production of milk is the aim sought, then the breeder should work for that end, but he should not neglect constitution in so doing, as many have done.

Our breeders of pure bred stock have in many cases suffered severely, and are suffering now, from the lack of definite aim or purpose in their work, although, fortunately or unfortunately for them, they do not know it in many cases. Many a farmer has started with pure bred stock simply because he wanted pure bred stock. Not having a definite knowledge of what he did want, and what it should be, he purchased stock which it would have been better had he never seen. Later, when he began to have an ideal, he found he had a herd that did not meet his ideal and that would have to be sold, perhaps at a sacrifice, or else spend weary years in trying to build up a herd that would come up to his ideal. It would be much better to sell those animals that did not meet his requirements and purchase those that did more nearly fulfil the requirements of his ideal. Had he formed an ideal of what he wanted before ever he purchased he would have saved both time and money.

In the choice of a bull the breeder needs to have his ideals well in mind, and not allow himself to be carried away from his purpose by fancy points that may add to the fashion but do not add to the utility of the stock he breeds. Having found an animal that meets the requirements of your ideal bull, be prepared to pay for him even to the value of half the herd, which he is. Many breeders have been content with an inferior bull, because the one that suited them exactly would cost them a few dollars more than they thought they could afford to pay. Money saved in this way in the purchase of a bull is often money thrown away. It may mean a step backward, or at least valuable time lost in the advancement of the herd, as it will require years to overcome the influence of an inferior animal.

We must not forget, either, the old adage, "feed is half of breed." Careful selection in mating and developing stock must go hand in hand with thoughtful feeding. One is no good without the other.

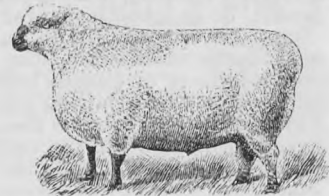
What has been said about an aim or purpose in breeding applies to every phase of farm work. Let every man ask himself the question: What is my aim, my object in this work? Apply it to every line of work on the farm. If you can't see clearly what your object is in doing a certain thing, or if you can't see all along the line, each step of the way from beginning to end, try to find out. Work for an aim and be sure to set it high enough, for you will always fall short of it.

Scrub stock of all kinds are ordinarily unprofitable feeders, no matter how cheaply they may be bought. There are three kinds of scrub stock; cattle with no improved blood kept under hard conditions and stunted; cattle that are so highly bred that their vitality and digestive and assimilative powers are impaired until they become mincing eaters, or, as our grandmothers used to say when the children had no appetite for breakfast, they become "simmet." Steers of the specific dairy breeds become scrubs in the feed lots because they put the fat on the inside, trying apparently to get it as near where their dams put the products of the cow as possible. The dam puts it in the udder; the steer puts a large part of it around his entrails. Rough fat is always cheap.

## J. A. S. MACMILLAN

IMPORTER AND BREEDER OF

**PURE BRED Shropshire Sheep**  
Young Rams and Ewes for sale at reasonable prices



### Importer of Stallions

For sale—that grand young Shire Horse, Nailstone Morning Star, 15741; and noted Hackney, Prince Danegelt, H. S. B. 4937.

2236

Box 483, BRANDON, MAN.

## Prairie Home Stock Farm,

CRYSTAL CITY, MAN.



**Shorthorn and Ayrshire Cattle.**  
**Shropshire Sheep.**  
**Yorkshire and Berkshire Swine.**

Correspondence solicited.

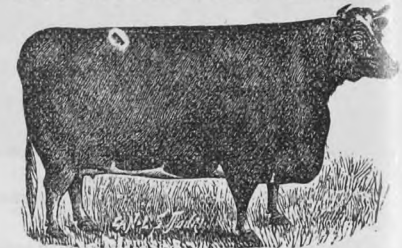
2260

THOS. GREENWAY, PROP.

## John G. Barron, Carberry, Man.,

Has for sale six very promising young

### SHORTHORN BULLS



by "Topsman," champion of the Winnipeg Industrial of 1897. Young females also by same sire. Write early if you want them.



**English Berkshires,**  
**Mammoth Bronze Turkeys,**  
**Toulouse Geese,**  
**Light Brahmas,**

For  
Summer  
and Fall  
Delivery

My first-prize registered **JERSEY BULL** for sale, cheap. Write for 1898 catalogue.

**WM. KITSON,**  
**BURNSIDE, MAN.**

## REGISTERED LINCOLN SHEEP

FOR SALE.



250 Shearling and Ram Lambs, singly or by the carload. Also a choice lot of Ewes of all ages. Breeding Stock imported from the leading flocks of England. Write us before buying elsewhere. Address—

**F. H. NEIL & CO.,**  
Railway Station, Lucan, Ont. P.O. Box 35, Lucan, Ont (2122)

Mention The Nor'-West Farmer when writing.



## SHEEP.

## Fattening Lambs In Winter.

By Professor Thos. Shaw, of the Minnesota Experiment Station.

This paper gives the more important facts contained in Bulletin No. 57, Section 1, recently issued by the University Experiment Station of Minnesota. It relates to the fattening of home-grown lambs, that is to say, of lambs from within the state.

As is generally known, lambs have heretofore been fattened chiefly at the stock yards so far as the work has been engaged in, and usually on screenings and hay. The chief reliance of the feeder has been screenings. There can be no question but that screenings is the cheapest grain food that has been attainable for such a use. It has usually been bought for not more than  $\frac{1}{4}$  of a cent per

were (1) to learn the comparative value in fattening lambs on certain combinations made up of the chief of the coarse grains grown in the state, (2) to compare feeding such food in limited and unlimited quantities, and (3) to ascertain the outcome from feeding such foods to a good type of home-grown lambs.

The lambs used in the experiment were Minnesota grown. The major portion were bought from David M. Fyffe, then manager of Wavertree Farm at Dundee. But some were bought from A. Gunn, Janesville, and a few were grown at the station. The price paid for the bulk of them was \$4 per 100 pounds when they reached the station. They were bought in August. Good finished lambs had sold the previous spring at \$6 per 100 pounds, hence the high price at which lambs were held at the time, but, owing to a drop in prices, such lambs could have been bought at from 50c. to \$1 less per 100 when the experiment began in December. They were excellent quality, and were essentially Shropshire grade in

and in this case also the oil cake was doubled at the middle of the experiment. A poor quality of native hay was fed during the first half of the experiment, but during the last half thereof good clover hay was fed.

The food was charged at average market values in the state. These were as follows: Oil cake, \$14 per ton; corn, 18c. per bushel; barley, 16c. per bushel; oats, 32c. per bushel; native hay, per ton, \$3, and clover hay, per ton, \$3.50. The grain was not ground nor was the hay cut. The lambs consumed on an average 2.30 lbs. of grain per day, and .82 lbs. of hay. The total daily consumption of food, therefore, was relatively small for such lambs, and exceedingly small in proportion to the gain made, as will be shown later. The cost of the food per lamb was  $95\frac{1}{2}$ c. for the 84 days' feeding.

The average weight of the lambs used in the experiment when the experiment proper began, Dec. 30th, was 98.2 pounds, and when it ended, March 10th following, it was 129.2 pounds, without shrink, and



Farmyard Scene at the home of Kenneth McKenzie, ex M.P.P., Burnside, Man.

Mr. McKenzie has been in the Province over 30 years and is of the opinion that Manitoba is a good, fertile, healthy country, second to none, a place where an industrious man must succeed.

pound, and in many instances for less, and it is equally true that screenings is one of the best foods that can be used in fattening this class of animals, because of the variety of the components which it contains, and because of the adaptability of the same to the needs of the sheep. It was determined, nevertheless, not to concentrate on experimentation with screenings, but rather with those other coarse grains which can be grown on any Minnesota farm. Screenings is a quantity so variable and so indeterminable, that it is impossible to reach conclusions from experimenting with them that would be of much advantage to the farmer. But before leaving this phase of the question, it may be well to state that no other grain food probably furnishes so safe a food to feed to sheep or lambs in a self-feeder.

The feeding period began Dec. 23rd, 1895, and covered a period of 84 days. The experiment proper began Dec. 30th and ended March 16th, 1896, lasting for 77 days. The chief of the objects sought

breeding, but some were the offspring of a Cotswold top cross on high grade Shropshire females.

One hundred lambs were fed. They were divided into five lots of twenty each and were fed in compartments of a shed opening into small yards, into which the lambs virtually had access at will; water and salt were accessible when needed. The lambs in lot 1 were fed oil cake, corn and oats in the proportion of 1, 3 and 6 parts by weight. This food was given in a self-feeder. The lambs in lot 2 were given a similar grain portion, but limited to what they would eat clean. Those in the remaining lots were also fed on a limited ration. The lambs in lot 2 were fed oil cake, barley and oats in the proportions of 1, 3 and 6 parts. Those in lot 4 were given the same kinds of grain during the first half of this experiment, but during the last half of the same the proportion of oil cake was doubled, and the lambs in lot 5 were given oats and oil cake in the proportions of 1 and 9 parts,

122.8 pounds, with shrink. The average increase in weight was 31 pounds in the 77 days of the experiment, or a trifle over 12 pounds per month. The gains are the best ever attained by the writer in any experiment in feeding lambs. They were superior to any gains made in Ontario experiments, even when such foods as peas and oats, clover hay and roots were fed. The cost of making 100 pounds of increase in weight during the experiment proper was \$3.05. With the lambs in lot 4, that is to say, the lambs given the extra portion of oil cake along with the barley, it was \$2.92. This is the cheapest production of mutton ever realized by the writer while fattening sheep and lambs. Wherever this can be done is a paradise for the feeder. During the experiment proper the profit on the increased weight was \$36.35, although the lambs were sold at the low price of \$4.65 per 100 pounds in Chicago. Under the circumstances such a result is simply extraordinary.

The net profit made on the lambs, ex-

cluding the one that died, was but \$22.00, or 22c. per lamb. This profit was small, but it was not in any sense the outcome of unsuccessful feeding, but rather of fluctuating market values. It is one of those instances which the feeder must now and then face. The lambs were bought when they were dear, and they sold on one of the lowest markets that we have had for years. When the experiment began the lambs had cost the station \$4.04 per 100 pounds, and when delivered in Chicago they only netted the station \$4.22 per 100 pounds. The advance, therefore, in the selling price over the cost price was only 18c. per 100 pounds. Had the selling price been normal for such lambs the profits would have been excellent. In every other respect the results were most gratifying with the lambs of all the lots except those in lot 1, which were fed an unlimited grain ration. Compared with the lambs in lot 2, which were fed the same foods in kind but limited in quantity, they made much the same gains. But in lot 1 one lamb died toward the close of the experiment, and several were more or less off their feed occasionally. The troubles were digestive, and called for special attention on the part of the feeder.

Although the increase made by the lambs was not far different, those in lot 4 made the best gains, and also gave the most profit. It will be remembered that the distinctive grain ration fed to these was barley, and they were given an increased portion of oil cake. The excellence of this combination of oil cake, barley and oats in feeding lambs has been further confirmed by succeeding experiments. The gains made by feeding oil cake and oats were nearly equal to those obtained from feeding the other mixtures, but the cost is considerably greater, and so it has proved in every instance in succeeding experiments.

The lambs were sold, as previously intimated, in Chicago. The price paid was \$4.65 per 100 pounds. The firm of Clay, Robinson & Co., who sold them, expressed the opinion that had they been 30 or 40 pounds lighter, and yet of equal quality, they would have brought 25c. per 100 pounds more. The winter of 1895 and 1896, it will be remembered, was the first season when the discrimination in favor of light lambs of good quality and finish was marked. Since that time it has become further intensified inasmuch that the growers of lambs must needs bow to the inevitable. It means that if large types of lambs are grown they must be marketed before they reach heavy weights. In some respects this change is unfortunate, for the good well-grown lamb will be more than 100 pounds when he reaches the winter market, unless dropped later, and when he gets over that weight he must needs be sold at a disadvantage as compared with his brother who is not so heavy. This change will unquestionably have an influence on the breeds from which sires shall be chosen.

It should also be noted that in this experiment the lambs made an aggregate gain of 1,691 lbs., or 238 lbs. more than during the first six weeks. Such a result is very uncommon, as usually the best gains are made during the first half of the period of feeding. These greater gains are doubtless to be credited to the good clover hay fed the last half of the experiment, and they emphasize the importance of using fodder good in quality.

Walter James, Maple Grove:—"I have been a subscriber to The Nor'West Farmer for a long time. I find it wonderfully improved in every way, and full of useful information. The photos are splendidly done. Hoping you will have every success."

### Ration for Show Lambs.

Lambs intended for show purposes require extra feed to force them along as rapidly as possible. The following ration for such lambs is recommended by Prof. J. A. Craig, who has had most extensive experience in fattening lambs. The ration he recommends is made of one-fourth bran, one-fourth oats, one-fourth peas, one-eighth oilmeal, and one-eighth wheat. The ration has been tried with one-quarter oilmeal and no wheat, but while the lambs did well they did not make as great a growth as was desired. The following year the above ration was used with great success. The addition of wheat in place of part of the oilmeal gave most satisfactory results. It is being used with great success again this year.

### Sheep at the Oxford County Show.

The exhibit of Oxford sheep at this noted show was not as good as it generally is. Mr. A. Brassy did not show this year, consequently his usual large exhibit was missed. The yearling ram class was not a remarkably good one. The leading winners were Messrs. Treadwell, Hobbs & Son, and Eady. Ram lambs were good. Messrs. Arkell and Wilson were the leading winners. The female classes were much superior to the male classes. J. C. Eady had the lead in two extra good pens of yearling ewes.

Hampshires were out in good numbers, and the lamb classes were particularly strong. The Earl of Carnarvon was successful in winning first place for pens of three ram lambs and three ewe lambs. Yearling rams were not nearly so good a lot as the ram lambs. Lord Rothschilds took the leading place. Yearling ewes were of great merit. A. DeMornay was the leading winner.

In Southdowns, the Pagham Harbor Co. were awarded the breed championship on a grand ram lamb, which was one out of the three lambs that won first place. Sir James Blyth was to the fore with yearling rams and yearling ewes.

Shropshires were out in good numbers. The leading winners were Messrs. Cooper, Bradburne and G. L. Foster-Harter.

Cotswolds were not shown in large numbers at all. R. Swanwick was the most successful winner in the various sections.

At the luncheon during the recent Paisley show in Scotland, Thos. Mitchell delivered a most witty and humorous speech against those exhibitors who always tried to tell the judge about the superior merits of their stock and what their ancestors had done. The judge was there, he said, to judge the animals, not by what they were descended from, or what they had been, or what they would make, but what they actually were as they stood before him. Too many exhibitors were like the Irishman, who was to be put on trial for moonlighting. His mother was trying to comfort him by telling him he had a righteous judge. "Divil a righteous judge I want," he said, "give me wan that will lean a bit." The show rings of America are not altogether free from this sort of work. It is humiliating for a judge to have an exhibitor praise the stock he is showing. It is as good as telling the judge that he does not know his business. Those in charge of the show rings should see that no exhibitor has a chance to speak to the judge. This rule should be rigidly enforced.

W. J. Woodcock, Minnedosa:—"The Nor'West Farmer is steadily improving, and I could not do without it."

## Swollen Neck

Also Had Great Difficulty With Her Heart—How Cured.

"My daughter had a swollen neck and also heart trouble. After the least exertion she would breathe so hard she could be heard all over the room. She could not sweep the floor or even move her arms without affecting her heart. Her limbs were badly bloated. Her father insisted that she must take Hood's Sarsaparilla, and we gave her about six bottles, when she was cured, and there has been no return of her ailments." MRS. EMMA THOMAS, North Solon, Ohio.

## Hood's Sarsaparilla

Is the best—in fact the One True Blood Purifier. Sold by all druggists. \$1; six for \$5.

Hood's Pills easy to buy, easy to take easy to operate. 25c. 1611F

## Thorndale Stock Farm

JOHN S. ROBSON, MANITOU, MAN.

Breeder of SHORTHORNS. Long established, reliable pedigrees; straight dealing always. Young stock of both sexes always on hand. Write early if you want them. 2185



## BERKSHIRES.

Two litters farrowed in February, two sows, six months old; also one SHORTHORN BULL. Plymouth Rock Eggs \$1.25 per 13. WM. KING, Oakley Farm, Carnduff, Assa.

## LITTLE'S PATENT FLUID

NON-POISONOUS

## SHEEP DIP AND CATTLE WASH.

The Original Non-Poisonous Fluid Dip.

Still the Favorite Dip, as proved by the testimony of our Minister of Agriculture and other large Breeders.

### FOR SHEEP.

Kills Ticks, Maggots; Cures Scabs, Heals Old Sores, Wounds, etc., and greatly increases and improves growth of Wool.

### CATTLE, HORSES, PIGS, Etc.

Cleanses the skin from all Insects, and makes the coat beautifully soft and glossy.

Prevents the attack of Warble Fly.

Heals Saddle Galls, Sore Shoulders, Ulcers etc. Keeps Animals Free from Infection.

NO DANGER, SAFE, CHEAP AND EFFECTIVE.

BEWARE OF IMITATIONS.

Sold in large tins at 75 Cents. Sufficient in each to make from 25 to 40 gallons of wash, according to strength required. Special terms to Breeders, Ranchmen, and others requiring large quantities.

SOLD BY ALL DRUGGISTS. SEND FOR PAMPHLET.

ROBERT WIGHTMAN, Druggist, Owen Sound.

Sole Agent for the Dominion. 1874

Mention Nor'West Farmer when writing



## SWINE.

## The Bacon Hog.

The poor bacon hog has been up lately for discussion a great many times in the American agricultural press, and will be up again and again. When Secretary Wilson issued his now famous letter last fall, advising the American farmers to grow more bacon hogs and to breed the Tamworth and Yorkshire breeds of pigs, the protests and wrath of the swine breeders knew no bounds. It was really amusing to read the comments on that letter in the various papers by leading swine breeders all over the country. As was natural, the pig breeder of the great corn belt could not imagine that it was possible to grow a pig that was worth looking at unless he had been fattened on corn and had a thick coating of fat, extending from his ribs to his skin, much less that more money could be made out of bacon hogs than out of the hogs that he had been so long accustomed to handle. Were they not fattened on corn, and what cheaper food can be got than corn?

Nevertheless, Secretary Wilson's letter

for them, allow them more exercise, grow them well, fatten them less, and market them before he had loaded them with fat. Many feeders have always provided their pigs with a pasture, but that was all they did get. They had to rough it until the corn was ripe. Then they were shut up and stuffed until fat enough to sell.

Feeders will have to learn that along with the pasture a small quantity of grain should be fed (and especially milk), instead of none at all. The hogs will make a much better growth and be ready for market just as soon, if not sooner, and at the same time possess ever so much better quality of flesh. What feeders want to learn is how "to grow" the pigs rather than how to fatten them.

The American feeder is at present getting more than a dollar a hundred less for his bacon hogs than his Canadian cousin. The bacon trade here has been years in developing, and this is our premium for our pains. As the Americans develop the trade they will get higher prices. The development there, however, will be much slower than it has been here, because the breeds of pigs developed in the great corn belts have the ability to lay on fat very quickly and make great weights. The breeders contend that these pigs turn them more money than the bacon pigs



Home of Kenneth McKenzie, ex M.P.P., Burnside, Man.

is bearing fruit. It has called attention to the bacon hog in a way that nothing else could have done. The characteristics of the bacon hog and how to grow him have been fully set before the people by the agricultural papers from one end of the country to the other. It has opened the eyes of people in the city as well as of those in the country to the fact that there is a class of pork superior, more desirable, and more wholesome than the fat pork to which they have been so long accustomed.

The discussion of the methods followed in raising the bacon hog will undoubtedly open the eyes of many breeders of short fat pigs to the error of their ways, and they will breed for more length and depth than they have hitherto done. It will be with them just as it was with the breeders of Berkshire pigs in Ontario. Before the introduction of the Yorkshire and Tamworth breeds, the breeders of Berkshires had got the pigs too fine, too short and too thick. The influence of the introduction of these new breeds and the demand for longer hogs for the bacon trade is easily seen in the increased length and depth of the Berkshire of to-day.

The agitation will also show many a breeder that he is feeding too much corn and concentrated feed to his young pigs. That instead he should have a pasture lot

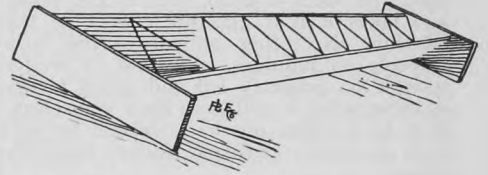
will. We will not see as rapid a development for another reason. The Tamworth and Yorkshire breeds may be introduced, but if these breeds are handled in the same way as those they have now and fed exclusively on a corn diet, it will not be long until they too will be no better as a bacon pig than the breeds they were brought in to supercede.

Pork products have brought Canadian feeders good money the last few years, and there is no reason why they should not continue to do so. There is no reason, either, why Manitoba farmers should not have a hand in the pork trade, as good pork can be raised and fed in Manitoba as in Ontario if set about in the right way. The facilities for handling it are here and cannot get anything like the quantity that can be handled. The demand is here, and American pork has to be brought in to meet the local demand, because there are not nearly enough hogs raised in the province to supply it. Here, then, is a market going begging at our very doors. Why not supply it?

Walter Little, McGregor:—"The Nor'-west Farmer is always a welcome visitor. It seems as though we could not get along without it now. We wish it every success in the future."

## A Convenient Hog Trough.

An exchange gives a very useful way of fixing a hog trough so that each pig can have only his own share of the trough, and at the same time hogs cannot get into it. The wire is not in the way of feeding and prevents the trough from spreading. The trough is made by nailing together, in the usual way, two pieces of plank, one six inches, the other eight inches wide. Now take a piece of No. 9



wire, or two lighter wires twisted together, and staple one end securely to one side of the trough about four inches from the end. Cross the wire to the opposite side and staple it at eight inches from the end, then back to the first side eight inches from where it was first stapled. This gives each hog eight inches of trough room, and if securely made will make a good trough.

## Pig Talk at Guelph.

The Ontario Experimental Farm has many visitors, and besides seeing they have a free talk on various practical topics. Here is a sample. It is Superintendent Wm. Rennie that speaks:—"We have five breeds of swine on the farm—Yorkshire, Berkshire, Tamworth, Chester Whites and Poland Chinas. We have found the fashion in hogs change like the fashion in ladies' hats, and we must keep up with the change, if we want to be in the swim. We all know how proud we used to be of our old blocky Berkshires; but we have found it necessary to put them away. What the packers call for is a long, lean side, thin, wedge-like shoulders, like the dairy cow, and as little jowl as possible. A Berkshire sow and Tamworth boar make a very good combination. The Berkshire alone is apt to be too fat in the shoulders and to have too much jowl. The Chester White mother and Tamworth sire also give fair results. For a good, all-round single breed, the pure bred Yorkshire is about the best. One objection to it as it stands is that there is sometimes a little too much jowl. With that bad feature eliminated, the Yorkshire would probably be the best of the lot. The objection to the pure bred Tamworth is that there is too long a shank to the ham. A Chester crossed with a Tamworth will give you 200 lbs. of meat more quickly than you can get it in any other breed, but you will not get the number of pigs from a Chester mother that you will from a Yorkshire. The same holds true in regard to the Berkshire. Thin hogs give bigger litters as a rule than fat ones. It is remarkable the number of pigs that a Yorkshire mother will produce. Above all things, keep clear of the broad shoulders and thick, fat bodies. The razor-back, with a sharp, wedge-like shoulder, the same as that of the milk cow, is what the packers call for."

"Is there," asked one visitor, "any difference in the result between taking a sow to the boar when she first comes in heat, or taking her later on?"

"I do not know," replied Mr. Rennie. "We have not experimented along that line."

"I have been told," responded the visitor, "that it does make a difference. An old breeder says that the sow should be

taken towards the end of the period. As an illustration, he mentions the case of an animal which had never given more than six at a litter, and which gave 21 when taken to the boar on the second day of heat."

Jos. E. Brethour, Burford, Ont., is on his way to England to visit the leading shows and make purchases of choice stock for his already noted herd of Yorkshire swine.

By nature the pig is a very clean animal, and likes a good bath in the pond, and takes it if it gets the chance in hot weather. No other animal of the farm scarcely so indulges. And if in winter time it be properly fed and given plenty of clean straw it will keep itself very clean. If it be a white pig its coat will be well nigh as white—perhaps whiter—than the straw.

N. H. Gentry, Sedalia, Mo., reports the death of the Berkshire boar, Baron Lee 4th. For over two years this boar was the property of Snell Bros., Snellgrove, Ont., and left a lot of excellent stock, which has spread all over Canada. The boar was only five years old and died suddenly. He was without doubt one of the greatest, if not the greatest, boars of his day. Some old breeders go so far as to say that he was the best Berkshire boar they had ever seen.

During the last two years there has been a steady decrease in the number of outbreaks of swine fever in almost every county in Great Britain in which the disease has during that period been at all prevalent, and in some cases the decrease has been very satisfactory. In Somersetshire, for example, the number of outbreaks has fallen from 641 in 1895 to 204 in 1896, and 72 in 1897, whilst in the West Riding of Yorkshire the figures have been 658 in 1895, 431 in 1896, and 162 in 1897.

Diarrhoea in sucking pigs may be caused by several things. A very frequent cause is having the sows too fat. Another cause, especially where pigs are fed the refuse from the table of large hotels or institutions, is the excessive amount of fat that is sure to be in such foods. Such foods should be thoroughly cooked, then allowed to cool and the fat skimmed off before the pigs get it. When the little pigs scour change the feed; give a little charcoal, a few cinders, coal or a little earth. These will be found most beneficial. Sometimes the sow will need a dose of medicine.

Recent sales of Herefords made by Wm. Sharmar, of Souris, are as follows:—To Hugh Ferguson, Moose Jaw, Assa., 9 head; 2 heifers and 1 bull for Thos. Richardson, Chaplin; 1 bull each to T. D. Watson, Richard Wilson and Wm. Turnbull, all of Moose Jaw district, and 1 bull each to Thomson Bros. and Fred. Rowley, of Wood Mountain, Assa. Mr. Sharmar sent the first Hereford into this district about three years ago to the Messrs. Thomson, who evidently were well pleased with his stock, as they ordered more of the same blood. Word has been received that all the cattle arrived safely at their destinations, and that the purchasers were satisfied with the stock, none having seen them before shipment, except Mr. Ferguson, Mr. Robertson, of Glendale, Man., who bought the cow, Damson of Ridgewood, and the young bull, Lord Glencoe, in April last, has been heard from lately. He is pleased with his purchase, and intends exhibiting them, also some very fine Poland China pigs, at Winnipeg.

John Rose, Newdale:—"I got Prof. Gleason's book last year and was well satisfied with it, but The Farmer is what I am after and would not like to be without it."

### Among the Breeders.

E. T. Dalton, of Russell, is a young farmer who is going in for breeding Shorthorns, having bought the 2-year-old bull, "Klondyke," and three cows at Maj.-Gen. Wilkinson's sale at Birtle last March.

Wm. Kitson, Burnside, is offering for sale his Jersey bull, Burnside Prince (40494). The bull has been exhibited four times, twice at the Industrial, once at Regina and once at Portage la Prairie, receiving two firsts and two seconds.

Robert Miller, of the firm of John Miller & Son, Brougham, Ont., is in England for the purpose of bringing out Shorthorn cattle and Shropshire sheep. His headquarters until July 15th will be the George hotel, Shrewsbury, Eng. He will no doubt be glad to purchase stock for any one wishing to import.

John Keiting, of Silver Creek P. O., near Russell, has some horses and cattle which are very well-known in the local show ring. A Farmer reporter dropped around to see his herd of Herefords and found his aged bull "Ne Plus Ultra," a very large fellow. He was looking for another bull to head his herd, and will not unlikely use the Industrial to aid him in a selection.

Robert Beith, M.P., Bowmanville, Ont., has secured the 3-year-old Hackney stallion, Squire Rickell, from T. W. Twaddell, of Devon, Pa., to head his stud. His sire is Cadet, and the colt resembles him. Rickell is a chestnut in color, of the wide, deep sort, with grand high action and great pace. His dam has been a frequent prize winner and is of one of the greatest maternal lines in the stud book.

J. A. McGill, Neepawa, writes us that he has had the misfortune to lose his grand aged sow, "Netty Lee." His aged boar met with an accident lately, in which he had a foot almost split open. He is doing nicely, but will not be in shape for the Industrial. Owing to these misfortunes and that fitting breeding stock for exhibition purposes is injurious, he has decided not to show this year. We will be sorry to miss his usual good exhibit of Berkshires, but his stock will be found in excellent condition and up to the mark whether he shows or not.

Wm. Murray, of Dugald, laid the foundation of his present herd of Jerseys in the fall of 1891 by purchasing from Mrs. Jones, of Brockville, Ont., one bull calf and two heifer calves. The bull, Belvedere Stoke Pogis, has developed into a grand good one, and is a sure breeder. Mr. Murray is now obliged to part with him because his own heifers are coming back to him. He will be a good purchase for some one. The heifer calves have also developed into good cows—one of them, Maggie Messina, a grand-daughter of Mrs. Jones' famous cow, Messina, has been a prize winner at the Winnipeg Industrial, and is proving a capital good breeder. Three of the young bulls are her offspring. The other heifer, Signal Hilda, that Mr. Murray purchased from Mrs. Jones, has developed into a typical Jersey cow. When judge of dairy stock at the Industrial, Prof. Shaw said she was as perfect a type of a Jersey as he had ever seen. She was placed first in her class twice at Winnipeg, and it takes a good cow to beat her. Two of the young bulls are from her. Mr. Murray will have his stock at the Winnipeg exhibition, and those wishing to purchase good bulls will do well to inspect his stock.

J. E. Haight, Ninga:—"We think your paper well worth the money, and think it greatly improved under your able management. Could not think of doing without it."

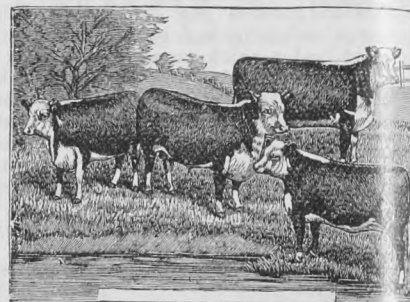
### HORSEMEN! THE ONLY GENUINE



See regular advertisement in last issue of this paper. Absolutely SAFE for any person to use. RELIABLE in results. Special information regarding any case sent FREE on request. Write for circulars. Price \$1.50 per bottle, express prepaid.

THE LAWRENCE-WILLIAMS CO.,  
21 Front St. W. Toronto, Ont.

### Ridgewood Stock Farm.



WM. SHARMAN,  
SOURIS, MAN.,  
BREEDER OF

### High-class Herefords

Particularly requests Ranchmen and Stock Growers to inspect his exhibit at Winnipeg and Brandon Fairs.

A FEW EARLY BULL CALVES FOR SALE.

### FARMERS CAN HELP THEMSELVES

By insuring against FIRE, Lightning, Wind Storms, Cyclones, in

### The Manitoba Assurance Co

PRESIDENT:

HON. HUGH J. MACDONALD.

VICE-PRESIDENT AND MANAGER:

H. H. BECK.

Write for particulars to Head Office, Winnipeg.  
RELIABLE AGENTS WANTED.



### The Maple Leaf Churn

EASIEST AND BEST

Ask your dealer for it, or send direct to the manufacturers,

WILSON BROS.  
COLLINGWOOD, ONT.

### YOU CAN'T DO WITHOUT IT

If you are going to furnish your home—our big Catalogue, containing over 300 illustrations—mailed free.

SCOTT FURNITURE CO.,  
Wide Awake House.  
WINNIPEG.



## Among the Breeders.

### MAPLE LODGE STOCK FARM.

About a mile west of High Bluff is the farm of R. McKenzie, well known as a breeder of Holstein cattle and large English Berkshire swine. His Holstein cows are in good working shape and doing well at the pail, especially one fine two-year-old heifer. Mr. McKenzie, however, is not now pushing his cattle so much as formerly, desiring to give more attention to pushing what he thinks is the best breed of all pigs—the Berkshires. In this he is greatly aided by his son, Dan McKenzie, a great admirer of the Berkshire. The Berkshires are in good shape, and will no doubt hold their own at the exhibitions this summer. Several additions have been made to the herd during the year, which will prove hard ones to get over. The aged boar, Milton Lad, a good second at Winnipeg last year, has held his own well and will be out again this year. Besides this grand boar, Mr. McKenzie has two others of great merit. One of these is Perfection, an unbeaten winner under 12 months in Ontario last season, including

veloped well during the year. A young boar of great promise is Manor Hero Prince, a Coxworth-bred boar. He is a straight, smooth pig out of Highclere 20th, and if he develops as he promises to do he will be a good one. Bessie, a full sister to Prince, is a capital, useful sow; so also are others that we saw. The whole herd have a thrifty, useful look that is very pleasing and should satisfy the most fastidious purchaser. Good strong bone and ability to stand squarely on their feet have been points that Mr. McKenzie has carefully developed. There is not a pig in the lot off his feet. Altogether they were one of the nicest bunches of pigs we have seen for some time. Mr. McKenzie will, as usual, make a good exhibit both at Winnipeg and Brandon.

### A GLANCE AT THE SHORTHORN HERD OF WALTER LYNCH, WESTBOURNE.

A few days ago a couple of The Nor'-West Farmer staff took a trip among the farmers around Macdonald and Westbourne. Among the farms visited was that of Walter Lynch, thoroughbred Shorthorn breeder. We found the genial

Th herd is headed by his aged bull, "Village Hero," which is just as quiet and looks quite as well as ever. He is the largest bull the writer ever saw, weighing about 2,700 lbs., and has a tight girth measure (think of it!) of 8 ft. 10 inches. Not unlikely he is the largest bull in Canada to-day, and is truly a magnificent animal. He is being largely used this year as a breeder, and is just as active as a three-year-old. His stock, which is well-known almost all over Manitoba, is his recommendation.

The second bull, "What For No.," a very pretty two-year-old roan, is an especially promising young chap. He took 3rd place last year at Winnipeg as a yearling and will run a hot heat this year. He is a shapely beast with pretty head and back line and measures unusually well around the thighs. Last year he was used a little as a breeder, and his calves have proven him to be not only a good stock-getter, but a getter of good stock. He also is being largely used this season, and, although not at all fat, weighs about 1,700 lbs. "Imperial Hero" is a dark red yearling bull, strong and well-built, and with an extra good hide; and "Cock



Farm of R. McKenzie, High Bluff, Man.

Mr. McKenzie's farm lies about one mile to the west of High Bluff. It has a gentle slope to the south and the soil is the usual rich deep loam. Mr. McKenzie has altogether about 1½ sections of land, about 400 acres of it being under cultivation, the rest being timber land. He usually summer fallows from 50 to 60 acres and has about 40 acres for hay. He has not tried brome grass but intends to do so. He grows corn with great success, and always a few acres of turnips and mangolds, particularly the latter, for winter feed for his pigs. He is a strong advocate of roots as winter feed for hogs. Mr. McKenzie came to Manitoba in June, 1871, from Middlesex County, Ont., and settled on his present place. He has always kept pure bred Berkshires since he came to the country and is a strong advocate of their superior qualities. He usually has some half-dozen or so breeding sows and nearly always from twenty to forty hogs on hand. He has had good luck with them and has won many prizes at the Winnipeg Industrial and other leading shows. In 1891 he purchased a number of pure bred Holsteins which have done well with him, but his hobby is Berkshire swine. A 14 ft. ideal windmill placed on the piggery grinds all the grain used on the farm.

first at Toronto. He is by Baron Lee 4th, out of T. Teasdale's best prize-winning sow. He has developed wonderfully since coming under Mr. McKenzie's care, and is going to make a rare good one. He possesses great length as well as depth, is of great quality and well-proportioned. He stands straight on his legs, and it will be a good hog that beats him in the show ring. Proud Victor, a Snell-bred boar, is another good one and well backs up the good qualities of the rest of the herd. He, too, is by Baron Lee 4th, and will make a grand second to Perfection. These two boars will make a hot class this year, if nothing happens to them. The young stock by Proud Victor is doing well. One litter of five, two boars and three sows, are exceptionally good and will give a good account of themselves when the time comes. The dam of the litter is Lady Bluff. She has proved herself a most valuable breeder, one of her offspring being taken east by the judge of the swine classes last year, Arthur Johnston, of Greenwood. She is a prize winner and descended from prize winning stock. Silver Maid, bred by George Green, Fairview, Ont., and sired by King Highclere, is a good, even sow, and has de-

veloped well during the year. A young boar of great promise is Manor Hero Prince, a Coxworth-bred boar. He is a straight, smooth pig out of Highclere 20th, and if he develops as he promises to do he will be a good one. Bessie, a full sister to Prince, is a capital, useful sow; so also are others that we saw. The whole herd have a thrifty, useful look that is very pleasing and should satisfy the most fastidious purchaser. Good strong bone and ability to stand squarely on their feet have been points that Mr. McKenzie has carefully developed. There is not a pig in the lot off his feet. Altogether they were one of the nicest bunches of pigs we have seen for some time. Mr. McKenzie will, as usual, make a good exhibit both at Winnipeg and Brandon.

Mr. Lynch's farm is about four miles northeast of Westbourne and within two miles of the south shore of Lake Manitoba. It is very prettily situated on the banks of the Rat Creek. His residence and buildings are in the midst of as pretty a maple grove as one could wish for, and just at the time of visiting the well-kept premises could not well have appeared more charming.

Of course, when speaking of a breeder so well-known as Mr. Lynch no introduction is necessary. He has been breeding Shorthorn cattle ever since he came to Manitoba, about twenty-six years ago, having brought a bull and two or three cows with him from near London, Ont. Although he is constantly selling animals, his herd at present numbers about fifty, and a very large proportion of them are very choice stock. In fact, little more need be said when it is known that his stock has taken fifteen 1st and one 2nd herd prizes out of sixteen showing.

of the North" is an eight months old red fellow and one which will likely make his mark at the shows this year. Perhaps about as nice, interesting and unique a thing as Mr. Lynch has about his place in the way of bulls is a pair of very pretty six months' old twin bull calves.

As to cows—well, to attempt to particularize would be out of the question. A great many of them possess in a superlative degree the points the stockman loves. Among the prettiest are "Silver Gem," roan, with a very nice calf at her side; "Rosette 10th," and her sister, "Rosette 14th," and two yearling heifers, red and roan. "Tiny 2nd" and "Imogen 2nd." Many of the cows show themselves to be good milkers, and this year calves are in profusion.

### SOME RUSSELL HORSES.

The show ring at Winnipeg has always brought out some good specimens of horse flesh. Many of the older breeders have been there so regularly that they have become part of the fair, while each year adds the faces of new competitors. D. T. Wilson, Assissippi, and his horses have for the past few years been very

much in evidence. I had a run up through that country in June and called upon D. T. to see his band. He has been breeding horses for 27 years (the past 16 years in Manitoba) and can talk horse lore by the hour. He was breeding driving stock in Ontario before he came to Asessippi and brought out with him a span of gray mares of the Messenger blood. One of them he still owns, and, though she is now 20 years of age, she still looks as smart and active as a young horse. The team weighed about twelve or thirteen hundred pounds each, and the mare which I saw is of the true Messenger type, with fine shapely head, magnificent crest, broad chest, well-ribbed, and with splendid limbs. Using this span of mares as a nucleus, he has been breeding to get more weight, and, by a judicious selection of sires, has preserved the style and action of the Messenger, and produced a remarkably good class of animals, instead of the irregular, nondescript variety which so often results by crossing with different stamps or breeds. Of course, he believes in care, not only in breeding, but also in feeding and handling, and his stock show it. When anyone goes among the band, they all follow him around, and each one seems to be the especial pet. Most of his stock of the present day belong to the agricultural class, with a few heavy enough to be classed as draught, and some light enough to go as general purpose or verging upon the roadster stratum, but the same characteristic features are observable throughout the entire band. For the past five years he has been a regular exhibitor at Winnipeg and has always taken a good deal of red card-board home with him. Last year he had ten horses at the fair, including two sucking foals, and took nine prizes. Probably his best animal is "Daisy," a 5-year-old. She has taken first place just as many times as she is years of age, winning last year as a brood mare. "Gentle" is a 9-year-old, and has also been a regular prize-winner. In 1895 and 1897 she took first place for herself and two of her get. "Victor," a daughter of "Gentle," last year took sweepstakes at Winnipeg. "Ethel," Mrs. Wilson's 5-year-old driver, took first as a roadster in 1896. And so we might continue throughout almost the entire list, but suffice it to say that there have been only two of his present band which have not won either first or second place at the Industrial, besides earning for him a good assortment of plows, etc., as special prizes. Mr. Wilson thinks there is good money in horse-raising, but, like everything else, the best is the kind which pays.

Geo. Cartwright, of Russell, has also been dealing more or less in horses, and I went to see his Clydesdale stallion, "Golden Hero." He has been a prize-winner at the city every year for the past five seasons, taking first place last year for himself and three of his get. He is weighing 1,800 lbs., and girls 7 feet 4 inches, with about a 27-inch collar measurement and a body "round as a barrel."

There are plenty of first-class working horses in this part of the country, and in a district like Russell stock-raising is bound to be a prominent feature.

W. S. Lister, Middlechurch, Man., has now at the head of the Marchmount herd of Shorthorns the young bull, Indian Nobleman. This fine young roan bull was calved April 1st, 1897. He was purchased last March, while Mr. Lister was east, from Arthur Johnston, Greenwood, Ont. He is by the famous bull, Indian Chief, and his dam is Canadian Duchess of Gloster 23rd, and she by Duke of Lavender, a grand good sire. Indian Nobleman thus comes of good stock and should do well in the hands of his new owner.

James Yule, farm manager for the Hon. Thos. Greenway, has recently returned from a trip through Ontario. While east Mr. Yule made a number of purchases of pure bred prize winning Shorthorns. From Alex. Smith, Maple Lodge, Ont., he purchased the bull Caithness (22065) by Joselyn (17438). Caithness is a thick, heavy fleshed bull and one of the best in Ontario. He will make a valuable addition to the Prairie Home farm and a hard one to beat in the show ring. He is a four-year-old and weighs 2,600. A young bull and a heifer of excellent merit and promise were also taken from the Maple Lodge herd. From H. & W. Smith, Hay, Ont., Mr. Yule secured the cow Vanity (24541) by Village Hero (14342). She was the winner of first prize in the class for four-year-old cows at Toronto last year. She should make a good addition to the herd, as she is an exceptionally good cow of great quality. From W. D. Flatt, Hamilton, Ont., he gets the nine months' old bull calf, Crimson Knight (26077) by Canada (19536). This is a promising youngster and will head Mr. Greenway's young herd. A splendid pair of Yorkshires were purchased from Jos. E. Brethour, of Burford, Ont. The boar at eight months weighed 400 lbs., and Mr. Brethour counts he is one of the best that the famous Oak Lodge herd has ever turned out. The sow is a prize winner. The herds will be shown at Winnipeg and Brandon.

The Bath and West of England show in Cardiff, which was held recently, proved a great success, the attendance being the highest since 1886, when the meeting was held in Bristol. From a financial point of view the show was also a success.

One of the worst mistakes a feeder can make is in buying or growing a poor quality of cattle. He may make as many, or nearly as many, pounds of gain per hundred pounds of dry matter fed, but the trouble is that these pounds will not sell in the market at a price that will ordinarily give him a profit. The man who does not know how to select the right kind of cattle for feeding purposes will not get rich feeding them.



## Fleming's Sheep Dip

GIVES UNIVERSAL SATISFACTION.

It does its work so thoroughly. It is not only the best dip for sheep, but used on Horses, Cattle, Pigs, Dogs and Poultry it is the best insecticide you can obtain. Easy to use and cheapest on the market. Send for a trial can. Quarts, 75c., ½ gals., \$1.50, 1 gal., \$2.50. Prices quoted in larger quantities.

## FLEMING'S DRUG STORE,

BRANDON, MAN.

2222

## HOMŒOPATHIC BIOCHEMIC REMEDIES.

—AND—

And Books on the New Treatment by Dr. Schussler. Every family should have a case and book who values health. Cases, with book, \$1.00 to \$5.00. The remedies are simple. Effects rapid. Send for our "New Grippe Cure." Never fails and removes all bad effects of Grippe. 25 cts. Try Golden Health Pellets, valuable in Liver, Stomach and Bowels. 25 cts.; 5 boxes for \$1.00.

D. L. THOMPSON,  
394 Yonge St., Toronto.

SEND FOR MANUAL.

Established 1868.

Mention this paper.

2231

## PUREST AND BEST

# Windsor Salt

Is used by the leading Creameries and Cheese Factories, and is also used in the GOVERNMENT EXPERIMENTAL STATIONS in preference to any other brand.

For sale by Wholesale Grocers.

WINDSOR SALT CO., LIMITED  
WINDSOR, ONT.  
1897



# FREE...

We test eyes free and fit all kinds of glasses. Large stock, all prices. We handle Incubator Thermometers, Dairy Thermometers, Drugs, etc. Write us for anything you require in these lines.

W. R. INMAN & CO., WINNIPEG.

## The Veterinary Association of Manitoba

Under the authority of Secs. 18, 19, 20, 22 and 23 of the Veterinary Association Act, 1890 (53 Vic., Chap. 60) the following persons ONLY are entitled to practice as Veterinary Surgeons in the Province of Manitoba, or to collect fees for service rendered as such:

Atkinson, John C.	Winnipeg
Alton, A. L.	McGregor.
Alton, W. W.	Souris.
Baker, G. P.	Russell.
Braund, F. J.	McGregor.
Coote, H. L.	Minnedosa.
Cox, S. A.	Brandon.
Dann, J.	Deloraine.
Dunbar, W. A.	Winnipeg.
Fisher, J. F.	Brandon.
Fowler, James	Souris.
Green, Enoch	Birtle.
Hatton, J.	Alexander.
Henderson, W. L.	Carberry.
Himman, W. J.	Winnipeg.
Hilliard, W. A.	Minnedosa.
Hilton, Geo.	Portage la Prairie.
Hopkins, A. G.	Neepawa.
Harrison, Walter	Glenboro.
Irwin, J. J.	Stonewall.
Lake, W. H.	Miami.
Little, C.	Winnipeg.
Little, M.	Pilot Mound.
Little, William	Boissevain.
Lipsett, R. C.	Carberry.
Lipsett, J. H.	Carberry.
Livingstone, A. M.	Melita.
Martin, W. E.	Winnipeg.
McDonald, J. D.	Oak Lake.
McFadden, D. H.	Emerson.
McGillivray, J.	Manitou.
McKenzie, G. A.	Neepawa.
McLoughry, R. A.	Moosomin.
McMillan, A.	Virden.
Monteith, R. E.	Killarney.
Murray, G. P.	Winnipeg.
Nagle, J. W.	Morden.
Reid, D. S.	Hartney.
Robinson, Peter E.	Emerson.
Roe, J. S.	Neepawa.
Rombough, M. B.	Morden.
Rowcroft, S. V.	Birtle.
Rutherford, J. G.	Portage la Prairie.
Sankey, Chas. A.	Boissevain.
Smith, H. D.	Winnipeg.
Spier, John	Virden.
Shoultz, W. A.	Gladstone.
Smith, W. H.	Carman.
Snider, J. H.	Virden.
Stevenson, Jas. A.	Carman.
Swenerton, W.	Portage la Prairie.
Thompson, S. J.	Carberry.
Torrance, F.	Winnipeg.
Taylor, W. R.	Portage la Prairie.
Walker, John St. Clair	Sheppardville.
Welch, John	Roland.
Whimster, Murdo	Hamiota.
Williamson, Arthur E.	Morris.
Young, M.	Manitou.

The practice of the veterinary profession in Manitoba by any other person is in direct contravention of the statute and renders him liable for prosecution.  
1612F W. A. DUNBAR, REGISTRAR.  
(1897F)





### Answers to Questions.

By an Experienced Veterinarian.

It is desired to make this column as interesting and valuable as possible to subscribers, advice is given in it free in answer to questions on veterinary matters. Enquiries must in all cases be accompanied by the name and address of the subscriber, but the name will not be published if so desired. Free answers are only given in our columns. Persons requiring answers sent them privately by mail must enclose a fee of \$1.50. All enquiries must be plainly written, and symptoms clearly but briefly set forth.

#### Lactal Fistula.

Subscriber, Clearwater:—"I have a cow, the upper part of whose udder is swollen and hard. This swelling has broken out in two places now. There was one opening before the cow calved, eight or nine weeks ago. The openings run a thick, creamy-red matter, and in appearance are like blind teats. One of the back teats has gone bad. Milk tastes and smells like that from a perfectly healthy udder. Cow seems healthy every other way. Is the milk good, and what should be done?"

Answer—The discharge coming from the udder of your cow shows that there is some diseased tissue in the gland, possibly of a tuberculous nature, and it would be unwise to use the milk unless boiled, no matter how good its appearance may be. Milk may look perfectly healthy and yet contain myriads of germs of disease. The only safe way is to stop using the milk when the udder is diseased in any way. If you wish to use curative treatment, procure from the druggist a solution of chloride of zinc, 40 grains to the ounce, and a suitable syringe with a nozzle small enough to enter the fistula. Inject a little of the solution once a day until the opening closes.

#### Persistent Urachus.

M. L. P., Oxbow:—"My colt is passing his water through the navel. He seems all right in other respects; is five days old. Can anything be done for him?"

Answer—The urine is escaping through the channel (the urachus) which was its proper course before the birth of the young animal. This opening through the navel should have closed immediately after birth. It will now require a simple surgical operation to close it. Take a stout needle, threaded with strong linen or silk, and pass it through a fold of skin just behind the opening. Bring the ends together in front of the opening and tie tightly. Do not include more skin than necessary. Sometimes the persistence of the urachus is caused by some defect in the other passage from the bladder, which prevents the urine from flowing in the normal direction. Should there be deformity in this respect, it will be beyond your skill to treat.

#### Swelled Legs—Pimples on the Skin.

Subscriber, Cypress River:—"Since the hot weather began, my mare, 9 years old, has broken out with little pimples on the skin, chiefly along the sides and back. They are not sore. Feel like shot in the skin; are not itchy nor raw. Her legs swell some at night. She has been well fed and cared for."

Answer—Possibly your mare has been too well fed and her present condition is the result. If you have been feeding much



## GREAT CUTS

We have decided to offer during

### EXHIBITION WEEK,

As a special inducement to our country customers,

### A Set of Silver or Rubber Mounted Single Harness

Made of first class stock and thoroughly reliable, for..... **\$9.80**

This harness has never before been offered for less than \$15.00. We are making this special cut merely for advertising and we hope every one will avail themselves of this splendid opportunity. Remember the firm and don't forget to call when in town.

## PEIRCE BROS.,

Corner Market and King Streets, Market Square,  
**WINNIPEG.**

N.B.—This offer holds good for any one sending through the mail during that time

corn, this is very likely the case, as corn is a heating diet and should not be used too freely in hot weather. Would advise a purge consisting of 7 or 8 drachms of Barbadoes Aloes (according to size of mare), and one drachm of ginger, made into a ball with a little soap. After the ball has operated, give the mare, twice daily in her feed, a large tablespoonful of sulphate of soda. A run on the grass would be beneficial.

#### Blind Eye—Opacity of the Cornea.

F. B., Napinka:—"A driving horse has a sort of scum over his eye. I don't think he is quite blind in it, but it looks bad, and I would like to get it off if possible. Have tried burnt alum, but no use. Am advised to try powdered glass. What do you think of it?"

Answer—The film over the surface of the eye is always the result of an injury to the eye, either from the whip lash, twig of a tree, or getting a foreign body, such as a piece of chaff, into it. If a foreign body is lodged in or on the surface of the eye, or under the lids the inflammation will continue until the offending substance is removed. If you have any reason to think that such a thing is lodged in your horse's eye, you should take him at once to a V. S. and have the eye properly examined. Blowing irritating substances, such as powdered glass and burnt alum, into the eye is a mischievous practice and cannot possibly do any good and may add fuel to existing inflammation. If there is no soreness of, or discharge from, the eye, you might apply a little calomel to the spot once a day. It frequently has a good effect in removing chronic opacities of the cornea.

#### The Mustang and the Indian Pony.

Donkey, Russell, asks:—"Would you please tell me, through your paper, the difference between the mustang, the broncho, and the Indian pony, and a little of the known history of each."

Answer—The difference between these horses is one of name and not of race, for they are all sprung from a common ancestry, the horses of Europe. Previous to the Spanish conquest of Mexico we can find no trace of horses in America, except fossil remains of prehistoric animals resembling the modern horse in some particulars. The native tribes looked upon the mounted Spaniards as monstrous creatures from another world, and endowed with all sorts of superhuman powers. It was the terror inspired by the



There's  
No Risk  
In Using  
FLEMING'S

## LUMP JAW CURE

It cures any case of Lump Jaw that is worth curing. Does it quickly and for good. Hundreds of cases cured during the last year. Easily applied. Safe to use and every bottle sold under this

#### GUARANTEE

That if it fails your money is to be returned. Price \$2.00 a bottle. Sent by mail upon receipt of amount. Illustrated treatise on Lump Jaw FREE.

#### TESTIMONIAL:

Nov. 24th, 1897.  
Dear Sir,—I used your Fleming's Lump Jaw Cure last spring on an aged cow. Two applications effected a complete cure. A neighbor used it on a two-year-old heifer with the same result.  
THOMAS KETTLES,  
Ramsay Corners, Ont.

Address—  
FLEMING BROS., CHEMISTS, BOX 610, WINNIPEG, MAN.,  
OR ST. GEORGE, ONT.

Mention this paper when writing. 2228

## BRANDON PUMP WORKS.

H. CATER, PROP.

Successor to J. M. Reisberry.

### Better than Klondyke Gold:

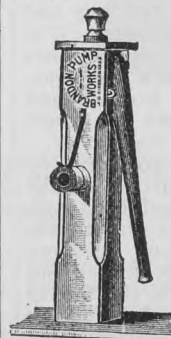
#### A GOOD PUMP

that will not freeze in winter.

We make a specialty of large Pumps for watering cattle—5-inch bore iron cylinder, porcelain lined.

All kinds of Pumps repaired. Office and Factory, Ninth St., opposite Northern Pacific Station.

Address—H. CATER,  
Brandon, Man  
Write for Prices.



## EDWARD BOYCE, CARRIAGE MANUFACTURER.

316 TO 322 ROSS ST., WINNIPEG, MAN.  
Grocery, Butcher, Baker and Commercial Wagons and Sleighs.

Spanish horseman which enabled Cortez, with a mere handful of followers, to overthrow the powerful and ancient Aztec rulers of Mexico. This shows conclusively that horses were unknown in the southern parts of North America, and there is no evidence to prove that they existed elsewhere on the continent. It is supposed that the bands of horses which at a later period were found roaming the plains of Texas and Mexico were the descendants of horses which had accidentally escaped from their Spanish owners, and, finding the country suited to their needs, had bred and multiplied. These bands of wild horses were at one time quite numerous and supplied the Indians of the plains with the horses they had known and used before the advent of white men to the western plains. Under careless methods these horses have degenerated in the hands of native owners until we see the result in the cayuse, or native pony. As far as we know, there is no difference between the broncho and the mustang, except that the latter is the term used in the south, Mexico and Texas, to denote horses of native blood, while broncho means practically the same thing in Montana and the west.

### The Teeth of Horses and Cattle.

*From an Address to Farmers' Institutes by  
Fred. Torrance, B.A., V.S., D.V.S.,  
Winnipeg, Man.*

Among the marvels of nature nothing is more interesting than the wonderful manner in which an organ common to a large class of plants or animals is adapted to special wants and uses in various species. Take a leaf, for example. Everyone is familiar with the vast variety of shapes and sizes of the leaves of our common trees and plants, but all carrying out the same functions of providing the plant with breathing pores. Yet nature sometimes adapts these organs to other uses, as we see in the leaves of the Venus fly trap, a tiny plant, whose leaves attract flies by a sweet exudation and then enfold and consume them, thus adding to their ordinary function that of providing nourishment for the plant.

In animals no organs are more wonderfully modified to various uses than are the teeth. Intended chiefly to prepare the food, by mastication, for digestion, they are adapted to all the various kinds of foods which different species consume. Teeth thus become characteristic of the species to which they belong, and it is easy to distinguish between the tooth of an herbivorous animal and that of a carnivorous one. Animals living upon flesh do not require to have the food finely divided to prepare it for the stomach, hence the teeth are more adapted for cutting and tearing than for grinding and overlap like the blades of scissors. The food of herbivorous animals, on the other hand, must be finely ground if the nourishment is to be extracted from it, and the molars or grinding teeth are large, powerful and roughened on the surface.

In some species the teeth are curiously modified to suit various objects. In the elephant the tusks are modified teeth adapted to uproot trees and to provide means of defence. The walrus has large tusks, which he uses to draw himself out of the sea on to the ice. In the beaver the incisor teeth are developed into powerful chisels, capable of cutting down trees, and in the poisonous snakes they are converted into hollow needles to convey the venom into the flesh of the victim—a forerunner in nature of the hypodermic syringe of the surgeon.

The teeth of all warm-blooded animals

are similar in one respect. They are all composed of the same materials, although these are arranged in various ways to suit different purposes. These materials are, 1st, the enamel; 2nd, the dentine or ivory; 3rd, the cement.

Teeth must be extremely hard to withstand the wear and tear of mastication, and this quality is found in the enamel—the hardest animal substance known. The dentine or ivory is a substance allied to bone, and, like bone, contains blood vessels and nerves and is sensitive to pain. Dentine forms the larger portion of a tooth. The cement is softer than either of the other materials and is interposed between the enamel and the gum, and fills up the depressions on the surface of certain teeth.

A simple tooth consists of a central portion of dentine surrounding the pulp cavity, a layer of enamel covering the crown and sides as far as the gums, and protected at the neck of the tooth by a layer of cement substance. The incisor tooth of the horse, for instance is of this structure,



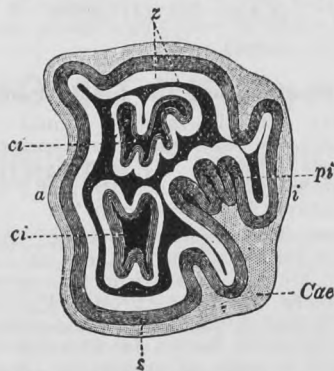
Diagram of Freshly-erupted Incisor of Lower Jaw of Horse—c, depression in table of tooth; s, cement, which rapidly disappears except from infundibulum; z, enamel; cd, dentine.

as also are the canines or "tushes." The surface of a horse's incisor has upon it an oblong depression, called the infundibulum, or "mark," formed by a folding inwards of the enamel. This depression is partly filled up by cement substance, which becoming darkened by exposure to the staining of various foods, gives the well-known appearance for the "mark" in young horses.



Lower Incisor Tooth of Horse—c, worn-down surface of table of tooth, showing the alternate layers of enamel, s; z, dentine; and x, discolored cement filling infundibulum.

The structure of a grinder or molar tooth is somewhat more complicated, the enamel being curiously folded, so as to produce a series of ridges on the surface.



Second Upper Molar of Horse, showing wear of table—ci, depression on table; pi, depression on side; s, enamel; z, dentine; Cae, cement; a, external or buccal surface; i, internal or oral surface.

In human teeth, as also in the teeth of dogs and other carnivorous animals, the

enamel covers the entire tooth, the grinding or biting surface as well as the sides, and such teeth are called simple teeth. In horses, cows and other herbivorous animals the teeth are not covered with enamel on the grinding surface, but all three materials, the enamel, the dentine, and the cement are here exposed. Such teeth are called compound teeth. The object of this arrangement is to afford a rough surface for grinding hard substances. In other words, on the fine surface of the teeth of herbivora, different substances of varying degrees of density and hardness are always met with, the function of which is to insure a constantly rough surface for the purpose of grinding; for a good millstone is composed of materials which wear with different degrees of rapidity, and thus, always remaining rough, most effectually grinds the substances over which it passes.



Transverse Section of a Superior Left Molar (enlarged.)

Another point of difference between human teeth and those of herbivorous animals is seen in the changes shown by age and wear. A human tooth, from the time when it has come fully into use, shows very little evidence of wear, and unless injured by accident or decay, is as perfect at forty as it was at sixteen. Such is not the case with the teeth of horses and cattle. From the time when they first make their appearance they are continually changing in shape and size as they become worn nearer and nearer towards the root, and these progressive changes enable us to judge, approximately, the age of animals of these species. The teeth also are pushed forward out of their sockets at a regular rate, estimated in the incisor teeth of horses at one-twelfth of an inch a year, thus preserving the line of contact with those of the opposing jaw at about the same level. Otherwise the continual wear of the surface would reduce them in time to the level of the gums. This progressive extrusion of the teeth from the gums takes place in the grinders as well as in the front teeth or incisors, and becomes very noticeable when from accident or decay a tooth becomes missing. The corresponding tooth in the opposite jaw, continues to grow, and having nothing to wear it off, it projects into the gap left by the missing tooth and gives much annoyance to the unfortunate animal.

Teeth of horses are classified as incisors, canines and molars. The incisors are those situated in the front of the jaws and used for biting off the grass, which is ground up by the molars. The canine teeth of horses are also known as bridle teeth or tushes, and are only found in the male sex, with rare exceptions. They were probably at one time in prehistoric ages a weapon of defence or offence, as the case might be, but in modern horses they are purely ornamental and have no useful function. Once in a while a mare is found who has so far forgotten her sex



as to have bridle teeth, but they are no use to her, and she is no better off for having appropriated this property of the male.

The molars of the horse are 24 in number, of great strength and solidity, to withstand the wear and tear of a long life of rough usage. If we estimate the useful period of a horse's life at an average of 15 years, his teeth will have ground up

front to back. As the horse becomes older the surface becomes progressively narrower from side to side, and thus, instead of remaining always oblong, it becomes triangular and then in very old animals flattened from side to side.

A glance at the figure will illustrate more clearly the nature of this progressive change.

In young horses, then, we judge the

both mares and horses are alike, but, at or near five years old, the canines or "tushes" appear in the male sex only. Up to the end of this period the determination of the age is a comparatively easy matter, and anyone who is at all observant can readily give the age of horses by looking at their teeth. After a full mouth is attained it is a more difficult matter, and the difficulty of accurately telling the age of old horses is greater in proportion to their age. So much is this the case that it is popularly supposed that it is impossible to tell the age of horses after they are eight years old. This may be true to a great extent among the untrained and inexperienced, but to an expert it is not difficult to tell the age up to fifteen years with a fair degree of accuracy, and after that age to approximate it within a couple of years. To do this successfully requires much experience and a careful inspection of all the visible indications of age. To rely upon one only, such as the "mark," is to court defeat. All should be observed, the mark, the shape of the teeth, their length, and the angle at which they meet those of the other jaw. But this is to go into the subject more deeply than is necessary, and if you remember the three facts already stated you will easily protect yourselves from being deceived in the age of a horse.

As for cattle, it is seldom that the teeth are consulted to learn the age; the rings on the horns being a more convenient indication. Now that dehorning is so greatly in vogue, it may become necessary at times to examine the mouth. Cattle have incisor teeth in the lower jaw only, and these are somewhat loose in their sockets in order to prevent injury to the cartilaginous pad in the upper jaw, against which they press. The incisors are eight in number and differ considerably from those of horses, having no "mark" on the surface and wearing much slower.

During the early period the age is de-

over 4,000 bushels of oats, in addition to some 40 or 50 tons of hay. Can we wonder that occasionally a tooth gives way to decay under what Mr. Mantilini would have called a "demnition hard grind."

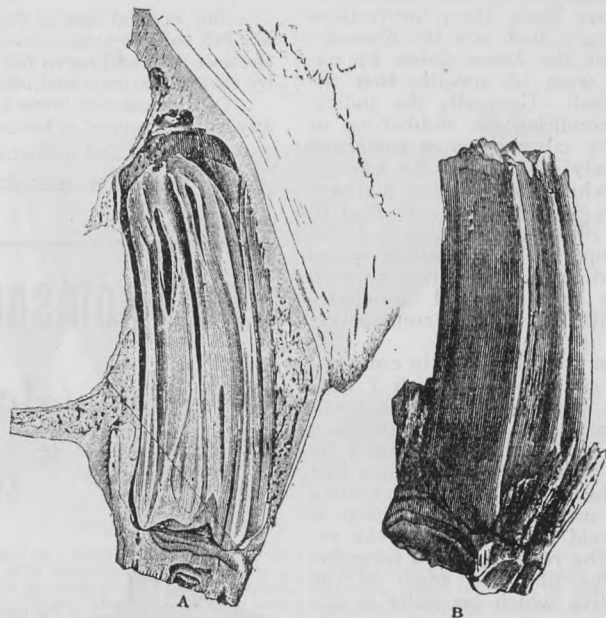
All warm-blooded animals have two sets of teeth, the temporary, or milk teeth, and the permanent. In the human race there are many individuals who find two sets altogether insufficient and have to supplement them by the aid of the dentist. Teething is a painful process to the young and inexperienced, but in mature years how many would gladly undergo the discomfort of it, if they could renew their teeth when necessary, as many kinds of fishes do. Horses are no exception to the rule and have two sets of teeth, both incisors and molars. The first set of teeth do not all appear at once, but successively by pairs, beginning with the central two incisors, which show themselves soon after birth; then the next ones called the intermediates, and, lastly, the outer two, called the corners. These successive appearances of the teeth occur at intervals more or less regular, and their replacement by permanent teeth taking place at definite times, makes it possible to tell the age of a horse with great accuracy up to the time when the last of these changes is completed. It will be impossible, in the time at my disposal to do more than outline the principles which guide us in

#### TELLING THE AGE OF THE HORSE.

We may divide the subject into two parts: 1. The age of horses under five years old, or during the growing stage. 2. The age of adult horses after five years old.

To distinguish merely between the young horse and the old, it is only necessary to remember a few salient facts. The first is that the milk teeth are present in the horse's mouth until he is between 4 and 5 years old. The second fact is that the "mark," or dark central depression on the surface of the incisors, becomes gradually worn out, and in a horse over eight years old has nearly always disappeared from the teeth of the lower jaw. The third fact is that the shape of the tooth alters as the animal grows older. At first the surface of the tooth is much wider from side to side than it is from

age by observing which of the milk teeth are present and which have been replaced by permanent ones. To distinguish between the milk teeth and the permanent, remember that the milk teeth are smaller, whiter, and have a distinct neck. Until a colt is over two years old, his teeth are all milk teeth, and the age is estimated from the amount of wear shown on the crowns of the teeth. Between two and three the first of the permanent teeth make their appearance and push out the



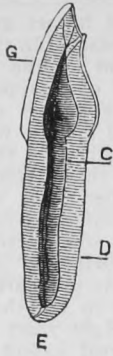
A. Transverse section of the superior jaw, showing the third molar of the first dentition and its replacing one, with the relations which they affect in the alveolus at the moment of eruption.

B. Third superior molar of the second dentition covered by its milk-tooth.

middle two teeth in both upper and lower jaws. A horse is said to be three years old when these central permanent incisors are fully in wear. During the next summer the second pair of permanent teeth appear, and when they are fully grown and in wear the horse is four years old. Between four and five the last pair make their appearance, and now the horse has what is called a full mouth. So far

terminated by the successive appearance of the milk teeth and their replacement by the permanent ones. After the full mouth is attained the age may be estimated by the amount of wear shown by the crowns of the teeth, and the gradual separation of them from one another that is seen in old cattle.

The molar teeth, as well as the incisors, are both temporary and permanent, and



Longitudinal Section of Incisor Tooth of Ruminant  
C, tooth-cavity; G, enamel; E, pulp-canal;  
D, dentine.

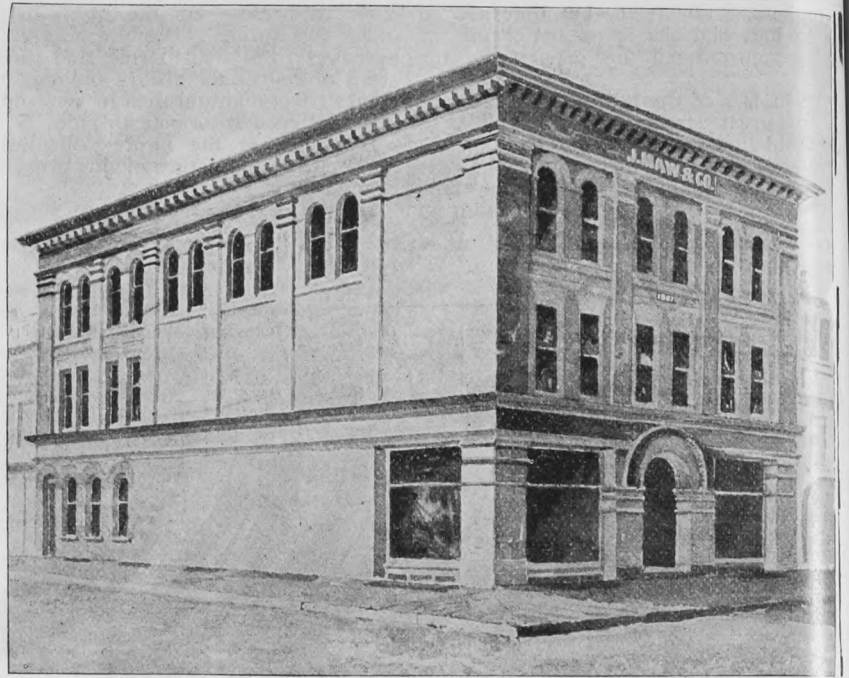
in cases where difficulty is experienced in finding the age by examining the incisors, the expert sometimes looks at the molars. This is a more difficult matter and need only be mentioned here.

The figure in p. 295 shows the manner in which the permanent tooth develops above (or below in the lower jaw) the temporary tooth, the root of which is gradually absorbed until only the "shell," as it is called, covers the permanent molar, and finally drops off. This replacement of the molars only takes place in the first three of each row, the others being always permanent.

In conclusion, a few words on the care of horses' teeth may be appropriate, for some of you may not be aware that horses suffer at times from toothache, as well as from several minor ailments of their dental apparatus. First, then, a word or two as to filing the teeth, and the necessity for it. Horses' teeth, i. e., the molars, frequently do not wear completely across the crown, and a small portion at the outer edge of the upper teeth and the inner edge of the lower teeth remains unworn and, as the horse grows older, these portions project here and there in the shape of sharp angles, which irritate the cheeks and tongue in contact with them. It is to remove these sharp projections that the teeth are filed, and the necessity arises whenever the horse shows by unthriftiness or want of appetite that the teeth are at fault. Generally the indications of this condition are slobbering, or dribbling frothy saliva when at work, and eating less freely of hay than he was accustomed to, while still relishing his oats. This condition, if neglected, may lead to consequences of a serious nature. The food, being imperfectly masticated, is not prepared for digestion, and the stomach and intestines are deranged in consequence, and attacks of colic, constipation or indigestion may follow.

Toothache in horses is rare in comparison with the condition of which I have been speaking, but I have seen many unmistakable cases, where the extraction of the offending molar was followed by such manifest relief of the symptoms that the cause of the trouble could not remain in doubt. In such cases the attention of the owner should be attracted by the refusal of food, the running saliva from the mouth, and the offensive smell of the breath and saliva which generally is noticeable.

In young horses the shedding of the milk teeth is sometimes attended with difficulty, and the "shell" tooth may remain attached to the gum at one side while free at the other and cause much pain and annoyance to the animal. They should be removed whenever necessary by means of proper instruments. The owner will consult his own interest by looking after such cases as soon as they are noticed; for a decayed tooth does not heal, nor a sharp tooth cease to irritate the mouth unless the proper treatment is adopted, and delay only causes additional suffering to the poor animal.



## THE BEST THAT MONEY CAN BUY

Chicago Airmotor Mills, Brantford Carriages, Sawyer Massey Road Graders.  
Also a full line of Pumps, Harness, Etc.

JOSEPH MAW & CO., CORNER OF KING AND WILLIAM STREETS, WINNIPEG.

## New Industry of Manitoba.

### THE BRANDON FELT FACTORY

MANUFACTURING

*Felt of all kinds from pure Manitoba Wools, Sole & Upper Stock, Polishing and Saddlers' Felt, Lap Rugs and Horse Blankets, Wool Filled Bed Quilts, Felt Boots, Shoes, Etc., Etc.*

Our Special line of Felt Shoes, with rubber sole securely cemented on to the ordinary felt sole, is pronounced by all to be the goods long looked for. The rubber keeps the sole dry, adding to the wear, and being corrugated, never slips, is especially prized by curlers, farmers and others who have to go in and about stables.

Our untearable horse blankets and lap rugs are made of a new fabric, stronger than any other material of twice its weight. See our sweat pads and saddle cloths.

For prices and particulars, kindly address—

FRED H. HESSON, Manager. SENKBEIL BROS., Proprietors.  
BRANDON, MANITOBA.

## The Thomson Marble and Granite Works.

James Thomson & Co.

DEALERS IN

Marble and Granite Monuments, Headstones,  
Marble Pieces, Tablets, Cemetery  
Fencing, Etc.

EIGHTH STREET, BRANDON, MANITOBA.

Between Rosser and Princess Avenues, nearly opposite Palace Hotel.



D. W. BEAUBIER,  
PROPRIETOR.

NEWLY FURNISHED THROUGHOUT.  
ALL MODERN CONVENIENCES.  
MOST CENTRALLY LOCATED HOTEL TO THE BUSINESS PART OF THE CITY.

## Palace Hotel

UNDER NEW MANAGEMENT.

ACCOMMODATING PORTER MEETS ALL TRAINS.  
OPEN DAY AND NIGHT.  
GOOD STABLING IN CONNECTION.  
RATES \$1.00 PER DAY.

EIGHTH ST., BRANDON, MAN.  
NEAR ROSSER AVE.





### Selecting the Dairy Cow.

By Professor T. L. Haecker, St. Anthony's Park, Minnesota, before the National Creamery Buttermakers' Ass'n.

By way of preface or introduction to what I may say on this occasion, I ven-

of data has been secured which is of inestimable value in studying the many intricate problems directly bearing upon animal nutrition and dairying. In this age of the world we can not be empirical in dealing with a subject of such vital importance, but must bring to bear upon it the theoretical, the scientific, as well as the practical phases.

We have labored long and patiently upon the problem of the cost of production, which, by the way, is simply another name for "a study of the dairy cow." Before I entered upon the work I had become thoroughly familiar with all the lore touching upon the points of the dairy cow, and had become pretty badly infected with many of the formulas that had been adopted by breeders and breed as-

may condemn a cow that has made, or can make in her flush, fourteen pounds of butter in a week, and I may approve of one that has never made, and never will make, twelve pounds in a week. A cow is simply a delicate and complicated machine that converts feed into milk, and the better that machine is adapted for the work it has to do, the larger will be the net return. So I shall deal only with the essential points and ignore those which are merely notional and fancy.

The two great questions that interest you are, what will the cow do? and, how much will she do? or, in other words, will she convert her feed into milk or meat? Now, if she is in the meat business, discard her. Sell her to some of your neighbors who are content to have cows earn about half as much as they should; or, better still, sell her for the shambles where she belongs. If the cow is not disposed to lay on flesh under good feeding, the next point to determine is her feeding capacity. When you are about to employ a laborer you instinctively "size him up" as to his capacity for labor. Apply the same rule to the cow. I never saw a cow with a deep, large, middle piece that was not a gross feeder, a big worker. Neither have I ever seen a cow with a small middle piece but that she was a light feeder.

I said that a cow was a machine. Now, every piece of machinery has a certain amount of friction to overcome, and the available power is only that which it can exert over and above the friction. The cow is no exception to the rule; we must first supply her with food of maintenance, and it is only what she can eat, digest and assimilate over and above the food of support that goes to meat or milk. A cow weighing in ordinary working condition 1,000 pounds, and having a large digesting capacity, will have great depth of body through the middle, and can eat 26 pounds of dry matter per day. She will use for food of support, according to the authorities, 18 pounds of dry matter per day, leaving available for converting into meat or milk, according to her disposition, eight pounds of dry matter. If she has only a medium feeding capacity, has only medium depth from the middle of



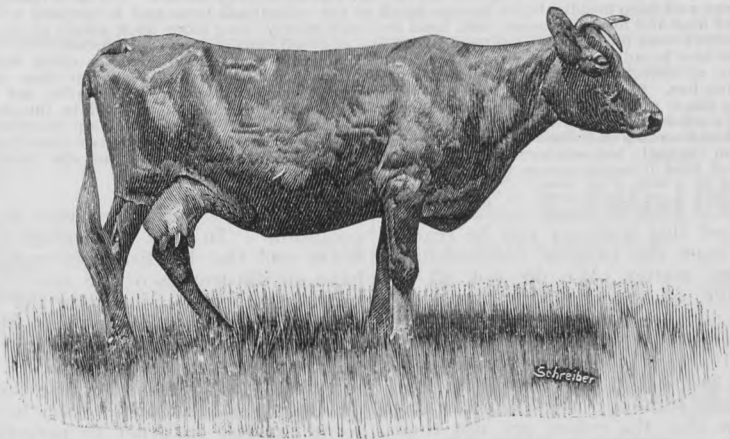
Our first subject is chiefly noted for lack of depth through the middle of the body. She will never be a good feeder, and, consequently will not do well in the dairy, for she will need nearly all the food she can eat for her own support. Her meat heredity is stronger than her dairy heredity, as is indicated by the straight rear thigh line. She is also too broad between hook points and too long from hook points to pin bones, as these characteristics make large quarters, which are not needed in the dairy cow.

ture a few words bearing upon my personal experience with stock, to show that I have not been lacking in opportunity to become somewhat familiar with the dairy cow. At the same time I do not wish you to lay any special stress upon my practical experience or that of any other man, for it alone rarely brings to any one knowledge and a trained mind and hand. Coupled with experience, therefore, we must have a mind, eager for information, open to conviction and zealous in its search for truth. Too many spend a lifetime in an occupation knowing no more about it at the end than when they commenced.

However, it was fortunate for me that prior to my entry upon experimental and educational work, I had spent some twelve years in the care and management of a valuable herd of dairy cattle, and studied the feeding and breeding problems from both a practical and theoretical standpoint. My personal attention was given to the minutest detail in their care and management, and so coming in daily contact with every animal in the herd for so many years, closely studying their needs and the conditions under which the best and largest products could be secured, I became a quick and close observer.

Since about the 15th of September, 1891, the day when the dairy herd arrived at the experiment station, every milking of each cow has been carefully weighed, tested and recorded. And during the past five years all the feed has been carefully weighed and record made of the kind and amount of food stuffs contained in each ration and the chemical analysis. Such comprehensive work could never before have been undertaken for the reason that, prior to the invention of the Babcock test, there was no short method of measuring the value of milk, and since this work was begun soon after the advent of the test, and followed up without a single break, a mass

sociations. But as my work progressed, one by one the idols fell. Yellow skin, straight back, wedge shape, long udder alignment, deep in the flank, fine, unctuous coat, handling qualities, lung capacity and well sprung ribs, all came to naught. I found that some of these points were possessed only by cows that were not de-



This is a fair type of a good dairy cow, being able to do a full year's work, which is clearly shown by her deep body. She is capable of yielding a large quantity of milk solids, because she can use for that purpose a large percentage of the food nutrients she takes, which is shown by her light quarters, light, clean neck and head. Her hook and pin bones might be a little sharper and probably would be if a little more regularity were exercised as to time of feeding and milking. She yields about six thousand pounds of milk and three hundred and fifty pounds of butter per year. With systematic feeding and milking her annual butter yield would not fall short of four hundred pounds. She can easily eat and digest fourteen pounds of grain, ten of hay and fifteen of fodder corn, and at present prices of feed stuffs will produce a pound of butter for about five and a-half cents worth of feed. She is a persistent milker, which is shown by her great feeding powers, without any disposition to lay on flesh. This means that she is an industrious feeder and not growing flesh she must convert it into milk, for there is nothing else she can do with it.

sirable for the dairy, while some others were common to both good and poor cows.

As I understand my duty to-day, it is to point out to you practical dairymen how to distinguish between an animal that will be profitable in the dairy from one that will be unprofitable, and in so doing I

the back to the middle of the lower belly line, she can consume and digest only about 23 pounds of dry matter, which would leave available for milk or meat production only five pounds of dry matter per day. If she has light feeding powers, is greatly lacking in depth through the middle of the body, she will be able to

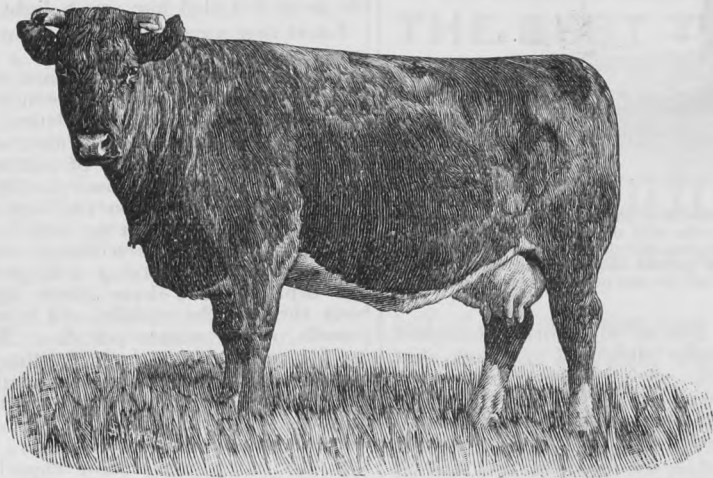
digest only about 20 pounds of dry matter per day, which would leave available about two pounds of dry matter per day.

So it will be seen that the amount a cow can eat, digest and assimilate over and above the individual need for food of support, is an important point, and the ability to at least approximately estimate her power to dispose of food, is not a difficult matter. The size of her mill is fairly measured with the eye, by the depth of the body through the middle from top to bottom, and the lighter her quarters, neck and head, the less food will she need for bodily maintenance. We have cows in our herd yielding over 300 pound of butter per year that are comparatively poor cows, because, having heavy quarters, neck and head, they require such a large percentage of the food for maintenance that the net return is very small.

On the other hand, we have cows giving no larger yield, that are profitable in the dairy, because they have light quarters and require a proportionately small per cent. of their food for food of support. Now, let us give a moment to the examination of the style of cow that will fill the requirements of the two simple rules laid down. I said that she must

that a large part of the arterial blood, which carries and distributes the nutrients, has been interior instead of exterior, as would be the case in meat heredity. Having found one marked characteristic where in these two classes of animals differ, the next point is to look for the cause. It is a settled fact that the flow of blood is thrown towards any part of the body where there is great nerve activity. Gestation is the result of nervous action, and in response to this nervous excitement an increased volume of arterial blood is forced to the excited parts, which are in turn nourished, strengthened and stimulated to still greater activity by the increased supply of nourishment, so by early and constant activity of the maternal functions they and the nervous system gradually gain such strength and activity that they become dominant over the lymphatic and motive systems, making the subject lean, but physically inactive.

This gives us that paradoxical condition so manifest in highly bred dairy cows of possessing a wonderful development of the nervous system, and yet having a strong disinclination to physical action. An alliance with the nervous and the maternal functions has evolved one of the most



This is a fine specimen of what is generally termed a general purpose cow. She is a good feeder. Note her large and deep middle, but it has too much of the cylindrical form and is coupled a little too closely. Her hips and loins are broad, tail, head and back meaty, long from hook points to pin bones, making a large frame for the hind quarters: rear line of thigh running nearly perpendicular and close to tail; shoulders broad at withers, brisket deep, front legs far apart, showing thick chest wall, neck rather heavy, all objectionable points for a dairy cow. She carries a much larger udder than does the cow preceding her. She gives a larger mess of milk when fresh, but it contains a smaller per cent. of milk solids; she is not a persistent milker. She is deep in the chest, but short lived in the dairy, because being a gross feeder and having a strong meat making tendency she will clog up internally with tallow, become barren and liable to garget. She may have done, or will do, one or two years' fair work, judging from the pail; but whatever she does she charges a good, round price for, as she takes heavy toll by way of food of maintenance.

not have a flesh-forming tendency. To explain how this tendency can be read at a glance from the exterior conformation, is no easy matter. We do not all see things alike, or, seeing and noting a certain point, do not apply the same measure to ascertain the degree of its development. So it will always appear to some people that there is good ground for controversy. But, because some are color blind, it does not follow that the colors are not there. The truth could be easily established were it not for the false prophets masked in the garb of authority.

The tendency to meat or milk production is governed within certain limits by heredity. The Channel Islands cow has inherited a strong tendency to convert food nutrients into milk solids; but we can so modify this peculiarity by improper and irregular milking, and under such unfavorable conditions and environments, that she begins to convert food into weight. But if we examine the carcass of such an animal, we shall find that the major portion of this acquired weight is composed of tallow deposited in the interior of the trunk, which at once reveals to the close student the fact that the dairy heredity has influenced the circulation,

wonderful and useful products in animal evolution. In the American trotting horse and the English thoroughbred we have an illustration of the remarkable results of an alliance between the nervous and muscular systems. And the chief reason that no such close and overpowering influence can be developed in animals for meat production is because the maternal functions must of necessity be allowed some exercise in order to perpetuate the species.

So we find that with animals under similar conditions those that are spare and angular are the ones best fitted for motherhood, because they have a stronger nervous system which will quickly be aroused to action by any disturbance in the maternal functions. Such animals are picked out most quickly by the thin, incurving thigh, light neck, quick and bright eye, sharp withers and prominence of the spinal column. Animals having these characteristics will be useful and profitable in the dairy. The more marked these points the greater the tendency to convert feed into milk, and the more they are modified the less satisfactory will they be in the dairy.

Do not be deceived by prominent udders, for a cow being fresh in milk may

# ALPHA DE LAVAL

## CREAM

## SEPARATORS.

We appoint you judge at the Winnipeg Exhibition. Please examine carefully the Separators and see where the "Alpha" De Laval ranks.

# CAMPBELL BROS.,

538 MAIN STREET,

WINNIPEG.

## MILKING

and cleanliness go together. No vessels are so free from taint or smell as Eddy's

## INDURATED FIBREWARE.

The indurating process hardens, and prevents soaking. This ware stands lots of use and some abuse and years of wear do not lessen its value. Send for our handsomely illustrated booklet (free).

The E. B. EDDY Co., Limited,  
Hull, Canada.

Pails, Tubs, Butter Tubs, Milk Pans, Dish Pans, Barrel Covers, etc., etc., etc.

# FRONTENAC BUGGIES

We ship direct to the people at wholesale prices. If not as represented we buy them back. They are guaranteed. It will pay you to send at once for our catalogue and price list. Crated with care.

## H. R. KEYES,

Reliable Farm Supplies,

MIDWAY MAN.



carry a large udder and for a time give a copious flow of milk; but if the rear line of her thigh runs down rather straight, she betrays a meat tendency and will soon begin to shrink in milk. A cow with a comparatively small udder, having no inclination to lay on flesh, may give less milk, but if she is a good feeder it will be found that the milk contains a large per cent. of solids. To make this a little more clear, let us suppose that we have two cows of the same weight and temperament and of equal feeding capacity, one giving twenty quarts per day and the other ten quarts. Under normal conditions both would of necessity be limited to the same amount of milk solids, because the available nutrients would be the same; so the only difference between them is that one mixes twice as much water with the milk solids as does the other. So, if enough water were mixed with the ten-quart mess to make it twenty quarts the composition of the milk from the two cows would be practically the same.

### An Advanced Milk Test.

The perfecting, by Dr. Babcock, of a quick, simple, accurate apparatus for testing milk has greatly facilitated the testing of cows at leading fairs in milking trials. At many of the fairs the largest yield of milk or fat, or fat and solids together, irrespective of cost, has been the basis upon which the awards were made.

At the World's Fair a step in advance was made, but the coming test at the Omaha exhibition will be the first great test where the award will be based on the proportionate yield to the food consumed. The test will be for ten days. The cows will be in the control of the committee, but they may be fed at the direction of the owner and milked by their regular attendants. They will be charged, however, with all the dry matter fed and will be credited with the fat and other solids produced. Rule 3 provides:—

"As a basis for comparison one point shall be allowed for each pound of solids not fat and ten points for each pound of fat contained in the milk."

"The points obtained in this way shall be increased by 1 per cent. for each week of lactation after the first month. In no case, however, shall more than 25 per cent. increase be allowed for advancing lactation."

"The number of points obtained in this way, divided by the number of pounds of dry matter in the food consumed during the test, will give a factor which represents the relative food economy of the cows being tested."

"This factor, multiplied by an arbitrary number (five is recommended), shall be added for each day of the test and the sum shall constitute the score. The cow having the largest score obtained in this way shall be considered the best."

The fundamental idea underlying the test is a score based on the economy of production. The best cow or the most profitable cow is not necessarily the one giving the largest yield, but the one giving the largest yield in proportion to the food consumed. If the test is patronized by representatives of the milking breeds we may be able to form some idea of their relative economy of production. After all, it will only be relative, because, although there may be 25 or 50 fairly good representatives of each breed, yet they are only representatives and may after all not be truly representative of the breed, as the poorer elements will not be represented. Nevertheless, such a test will go a long way towards settling the supremacy of any one breed for dairy purposes.

### Care in the Dairy.

To hint to a farmer's wife or daughter that she does not make good butter is like the proverbial red rag to the bull. The butter is often good, still a lot of it is not so good but that it could be improved upon. The whole trouble seems to arise from the inertia of human nature, the dislike to spend time upon the trifles, or to take the necessary pains that go to make up perfection. This bother is the great obstacle to success in more lines than in dairying. "I could never take the time," you hear one person say. An-

other will say, after watching how good butter is made by the expert with the travelling dairy, "I can make up my butter in half that time." Until people will take the time and pains to do the work right, perfection in butter making will not be attained.

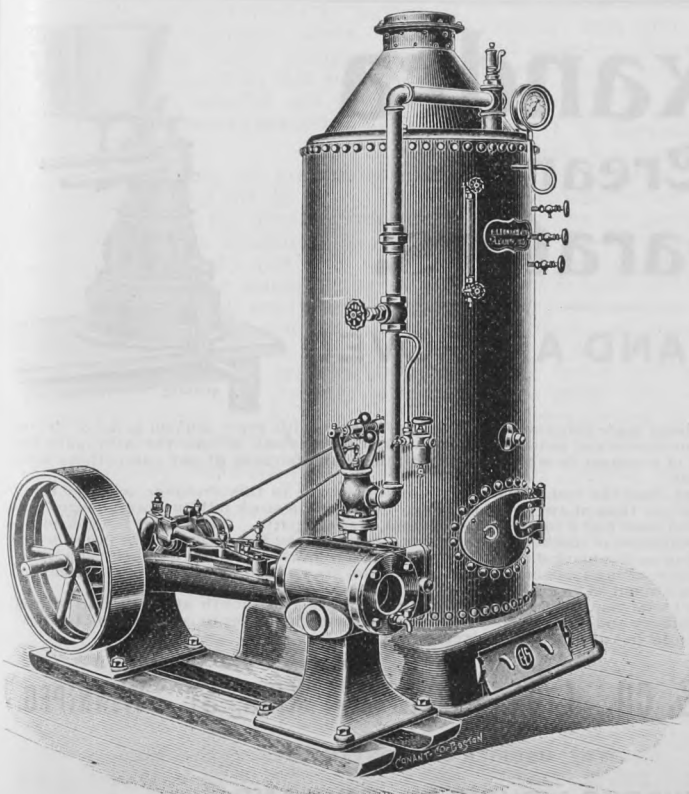
### Dangerous Preservatives.

The use of preservatives has gained ground among milkmen and milk shippers in many of the States of the Union until the public is becoming thoroughly alarmed. These preservatives are advertised and lauded by unscrupulous nostrum vendors as being entirely harmless and as making all care and cleanliness in the handling of milk unnecessary. One after another these preservatives have been shown to be harmful and their use not necessary.

The latest substance put upon the market as a preservative is Formic Aldehyde, for which is claimed the great advantage that it cannot be detected by chemical analysis. It is a powerful disinfectant and antiseptic substance. Doctors have been obliged to discontinue the use of it as an antiseptic even in extremely diluted forms. Solutions as dilute as one part to 10,000 parts of water, when used continuously as washes, cause the skin to die and peel off.

Preservatives of any kind are not needed to keep milk in proper condition. All that is wanted is thorough cleanliness and proper cooling of the milk. If these fail, pasteurization may then be tried, but it must also be backed with cleanly and sanitary methods of handling.

The members of the British Dairy Farmers' Association take an annual jaunt to some place or district of importance to see and learn all they can of dairy methods practiced in other places. They have visited in turn nearly all the leading dairy centres of the continent. This year their annual jaunt was to the southwest portion of England, where a number of very fine dairies and dairy herds were visited. An effort is being made to get the Association to visit Canada next year.



We have secured the Agency of the

## LEONARD BOILERS AND ENGINES

FOR DAIRY AND FARM USE.

THE MOST ECONOMICAL ENGINE MADE IN AMERICA.

Call for Prices and Particulars.

## THE AMERICAN CREAM SEPARATOR

IS STILL TO THE FRONT.

Read the following Testimonial:—

CLUMBER, ASSA., June 11th, 1898.

S. M. BARRE, ESQ., Winnipeg.

Dear Sir,—The American Separator which I bought from your agent, J. N. McLeod, has given entire satisfaction. I have worked the "Alexandra" and consider the American by far easier to operate. I have also examined several other Separators and find the American superior in construction, strong and durable and easier to clean. A fourteen year old girl staying with me can put the whole milking through the separator easily.

(Signed) JOHN SHEARER.

For particulars address—

**S. M. BARRE,** 240 King Street,  
WINNIPEG.

### The Western Creameries.

Prof. J. W. Robertson, the dairy commissioner, recently completed a visit to a number of the creameries in the Territories. He stated to a representative of The Farmer that everywhere the country was in excellent condition, in fact, owing to the abundance of rain, the country was looking the best he had ever seen it.

The outlook for the creamery business is most encouraging, and he expected that the make this year will be at least a quarter more than that of last year. All the creameries that were running last year are running again this year. Three of them, however, will not make as much as they did last year, because the high price of wheat has tempted the patrons to go more extensively into wheat. The government has taken over the management of the creameries at Saskatoon and Salt-coats, and a new creamery has been built at Churchbridge. In all, there are three more creameries under his supervision this year than there were last year.

Prof. Robertson reports a decided improvement in the quality of the butter made this year, and says that it is as fine as any made in Canada. This he attributes to more experience on the part of the makers and also on the part of the patrons and gatherers in knowing better how to care for and handle the milk. Last year was their first experience and they were all new to the work. The cold storage chambers at the creameries are working well. With a very small quantity of ice the butter maker can hold his butter at a temperature of between 30 and 35 degrees during the hottest weather. An effort is being made this year to cultivate the Japanese markets. Butter sent to this market last year met with great success. Five factories are putting up butter in small tins for this trade. Canadian butter arrives in a very much better condition than either Danish or French butter, and is displacing these butters.

### The Value of Skim Milk in Calf Raising.

At the annual meeting of the National Creamery Butter Makers' Association, Prof. C. F. Curtiss, of the Iowa Experiment Station, said that skim-milk, like many other sources of wealth, was not fully appreciated. Its nutrients are so abundant and so readily available that it is a most wholesome nutrient for human diet as well as for that of the calf. Five pounds of skim-milk furnishes the same amount of flesh-forming constituents as a pound of beef steak.

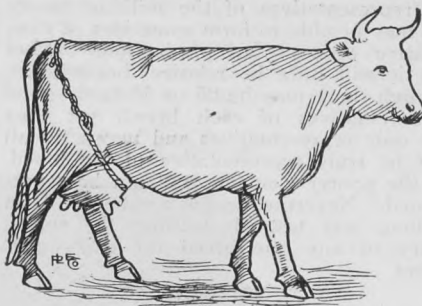
The nutrients contained in skim-milk fed in perfect condition are almost wholly digestible. In their experiments calves had made a gain of one pound during the first 90 days from 1.78 of dry matter in the ration, which consisted of skim-milk, hay and oats. With fattening steers it usually takes from 11 to 12 pounds of grain and hay to make one pound of gain. The first 90 days was the time to make a calf do its best. He wondered why there were so many scrawny, worthless calves in the country. He said the ignorance and neglect of the feeder were largely to blame for it. It is absolutely essential that the milk be fed in uniformly good condition, not sweet one day and sour the next and at varying temperatures. Such feeding will spoil any calf. Much harm was done by over-feeding, and derangement of the stomach was sure to follow. This would give the calf a backset, from which it would take time to recover, if it ever did. At the beginning three to four pounds at a feed was plenty. Feed this

amount twice a day. If fed three times a day, feed only from two to three pounds at a feed. Gradually increase the quantity. His calves get new milk for a week; then a little skim-milk is added until at from two to three weeks of age they get a full ration of it, which is 20 pounds.

The fat of the milk is supplied by flax seed, ground, then boiled before being fed; or by oatmeal or cornmeal fed dry. He had found these the best substitutes for the fat. Clean quarters, sunlight and good air were essential, and should be supplied with as much care as feed.

### To Prevent a Cow From Kicking.

A cow that kicks while being milked is a source of great discomfort, and any simple contrivance that will break her of the habit is worthy of notice. Pass a rope around her just in front of the udder and



back of the hip bones on the back; draw it tight enough to be pretty snug. Make a loop in one end, pass the other through it, and after drawing up as close as wanted, twist the end under, and the work is done. With a rope thus adjusted it is difficult to induce a cow to kick.

### The Milk Test at Brantford.

Some dissatisfaction has been expressed with the conditions of the milk test at the Ontario Provincial winter show. Accordingly a committee was appointed to

devise a new set of rules for judging the cows. It was felt that the rule allowing one point for each pound of milk gave those cows giving a large yield of milk an undue advantage. The following scale of values was adopted by the committee: 10 points for constitution and conformation, 20 points for each pound of fat, 4 points for each pound of solids (not fat), 1 point for each 10 days in milk after the first 30 days (limit 30 points.)

This, it is thought, will give greater justice to all concerned than the scale under which the judging has been done for some years. This scale is very similar to that to be used at Winnipeg this year. The difference being that in the latter scale no points are allowed for conformation (we see no reason why there should be any, because it is the ability not the conformation that should be judged), and that 1 point is given for each ten days in milk after the first 20 days in milk (limit 200 days.) A deduction, however, is made of two points for each 1-10 per cent of fat below 3 per cent, of fat in the milk.

A dairyman milked 24 cows, got after them with a Babcock tester, found eight robbers and discharged one milker. At the end of the year he found that the sixteen had paid as great a profit as the 24. There are plenty of dairymen who could give very much the same experience if put to the test. There is no need of working hard and then being a slave to a hired man to milk the half of the herd which does not pay.

On the 21st of June a representative of The Farmer called at the North Norfolk Dairy Association's creamery, which is splendidly situated in a bluff half way between McGregor and Austin. The butter maker, Wm. Hurstfield, was very obliging in the way of giving buttermilk and information. The creamery has made this season to date 6,000 lbs. of butter. The price paid, until the 1st of June, was 15c. per pound. Since then only 12c. has been paid. At this low price one patron got \$16 for the first two weeks of June. He milks 12 cows and had this amount of money for cream sent over and above that required for butter for their own use.

## Alexandra Cream Separators.

### TESTED AND APPROVED



A vigorous effort has been made this spring by a host of agents with every known make of Cream Separators, bearing various names and putting forth all sorts of pretensions, to oust the Alexandra, but it has come victorious out of a contest in which the truthfulness and fairness of our competitors were subject to a heavy discount.

The ALEXANDRA has stood the test of six years' continuous use in this Province, with the result that to-day the sales are larger than at any previous time. We have in stock in Winnipeg all sizes suitable for five to five hundred cows and a complete assortment of spare parts. This latter is a consideration we commend to the attention of intending purchasers. Suppose you buy certain of the other Separators that have been sprung on the market. You will soon need repairs. The agent more than likely has thrown up the job—gone selling trees or something, and you are saddled with a machine the maker of which you know as much about as an eight year old horse knows of his father.

Readers of The Farmer who visit the Industrial Fair in Winnipeg this month are invited to inspect our exhibit of Dairy Machinery and apparatus. It will enable them the better to comprehend the position the Province of Manitoba has attained in Dairying.

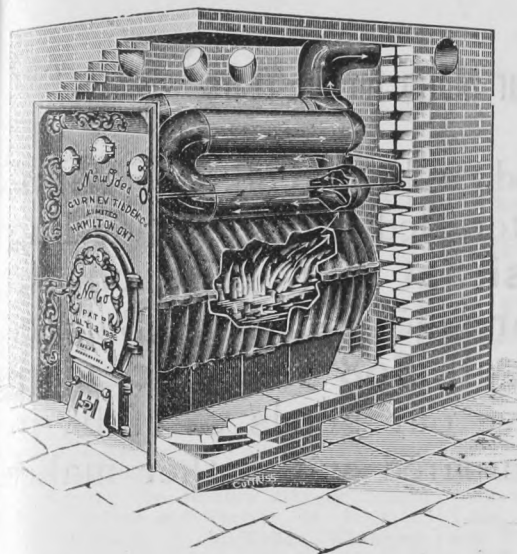
### R. A. LISTER & CO., LTD., 232 & 234 KING ST., WINNIPEG.

(18 ST. MAURICE ST., MONTREAL.)

WORKS: DURSLEY, ENGLAND.



# Gurney's "NEW IDEA" FURNACES.



**DON'T  
FORGET**

**Before  
Purchasing**

**YOUR  
FURNACE**

**To Find out Something  
About—**

**"THE NEW IDEA."**

We have manufactured and sold hundreds of them, and thus have given the best satisfaction.

See what Mr. T. C. Jones has to say about our Furnaces.

**Office and Warehouse:  
RUPERT STREET.**

August 10th, 1897.

The Gurney Stove and Range Co., Ltd.,  
Winnipeg Man.

Dear Sirs,

In November last I bought a No. 50 "New Idea" Wood Furnace from you, for our new house on Burrows Avenue, in this City, and gladly give testimony to its value as a heater. The past winter was more than usually stormy, as well as long and cold, and gave abundant opportunity to test the heating powers of this furnace. Our house has four or five rooms on each of two floors, and contains about 20,000 cubic feet of air-space, all of which can be easily heated to a comfortable temperature on from ten to twelve cords of wood for the winter with this furnace. The six steel drums connected as they are by heavy, well-connected castings, making a compact and solid structure, make great heating surface, with small fires in spring or larger ones in colder weather, and do their work well. I am very well satisfied with it, and consider it the best wood furnace in the market.

Yours truly,

T. C. JONES.

## Skimmings.

It is wonderful what capabilities the cow has to produce. Last year at the "Hood" Jersey farm in Massachusetts two cows made 655 and 652 pounds of butter each without any forcing. At 20 cents per pound this meant an income of over \$130 each for butter alone. One of these cows gave 12,000 pounds of milk. Though every cow may not do as well as this, if properly selected and fed she will do a great deal more than many dairymen imagine.

There are plenty of creameries along the central part of the M. & N. W. railway, and between the ones at Shoal Lake, Birtle, Foxwarren, Binscarth, Russell, the Barnardo Farm and a few small ones of a private character the wants of the farmers in this respect are all pretty well supplied. A Nor'-West Farmer reporter visited the Binscarth and Foxwarren creameries recently, and they both reported business good, although late in starting. The latter changed hands the fore part of June, having been bought by A. Laycock.

The Brandon creamery is doing a thriving business this year. The daily output is from 400 to 700 pounds, and the make is on the increase. The supply from the district immediately around the city is considerably in excess of that of last year, while about twenty of the surrounding stations send in regular shipments. Already considerably over 12,000 pounds have been made. A considerable quantity of it is being marketed in Brandon; the balance goes to British Columbia markets.

In cleaning a separator it is best to wash at first in warm water, not in hot

water; not hotter than the hands can bear, because boiling water coagulates the slimy matter, which then sticks fast to the surface of the bowl, and is very hard to remove. Wash the parts quickly in warm water, using a stiff brush in the corners where required, and then steam thoroughly or plunge into boiling water for a few minutes; then wipe lightly the thin parts, and place in a dry, warm place, where the heavier parts will dry themselves thoroughly from the steam or hot water.

Mr. J. L. Rideout, of Hazel Hill Farm, Solsgirth, is a farmer who aims at the top notch in dairying. He has been doing considerable in the matter of private butter-making for some years, dealing with a special line of customers. This year he has erected a nicely-built stone dairy, furnished it with all the most approved machinery and equipment, is devoting all his time to it, and manufactures the cream of three or four of his neighbors. Only separator cream will be taken, and that has to be sweet and uniform. Mr. Rideout has been aiming to catch a special market—and is doing it.

Prof. Curtiss, of Iowa, said in a recent address: "I want to take this opportunity of saying that, in my judgment, the farm separator has come to stay. A system that has so much merit must sooner or later prevail. The farm separator will double the value of milk over the creamery separator under prevailing conditions. On the college farm the introduction of the hand separator and the substitution of skim-milk for whole milk in calf-feeding resulted in a monthly saving of \$25 to \$40 in a herd of 40 cows, and the calves raised compare favorably with the best that can be raised by any method."

Secretary Wilson is trying to develop the butter trade with England. It is his intention to capture that market for the Americans if it can be done. Recently he placed an order with a creamery in Iowa for an experimental shipment of butter to England. In 1897 the United States sent a little more butter to England than Canada did; they are determined to keep this lead and to increase it. So far the amount of butter sent by either country is a very small proportion, about 2 per cent. of the total amount of butter imported by England. Canadians will have to look out for their laurels, for the Americans want to become the provisioners of the Old World.

The Government creameries along the M. & N. W. railway are doing well. Both the Yorkton and Saltcoats factories are being well patronized. H. S. Pearson is the maker again at Yorkton, and the factory there is being very well patronized by the farmers this season. The Saltcoats factory has been changed from private to government auspices. Prof. J. W. Robertson addressed a meeting of the patrons last month. S. B. Kinsey, last year's maker, has been retained. He was for one year buttermaker at the O. A. C., Guelph. At Churchbridge a fine new factory has been built, and was being fitted up to be opened Monday, June 27th. There are many Icelanders in this district doing well. The farmers of Kinbrae, a Canadian settlement southwest of Churchbridge, are also in a very prosperous condition. Most of them confine themselves almost exclusively to stock-raising and dairying, and a good deal of attention is being paid now to the cultivating of a quantity of green feed and tame hay. Quite a few are launching out into growing Brome grass.

# McLaughlin Carriages

## Are Good Carriages

"One Grade Only and That the Best."—Our Motto for 30 Years.

We would like to have every **peg Exhibition**, and who is **buggies and Cutters, pay us a Grounds.** We will exhibit



**Mikados, Spring Wagons, Carts, Etc., and all 1898 and '99 designs of Cutters and Sleighs.** We like to have our goods carefully inspected by intelligent people and then compared with other makes.

body who attends the **Winnipeg Exhibition**, interested in high grade **Buggies, Carriages, Phaetons, Buggies,**

# McLaughlin Carriage Co., Oshawa, Ont.

### Successful Plowing Matches.

#### Blyth.

South Brandon takes the cake for its strong lead in encouraging good plowing, one of the most important departments of farm work. Good plowing has much more in it than most people see. S. A. Bedford humorously suggested that perhaps a crooked furrow would grow as good wheat as a straight one, but he generally found the man who had a straight furrow and took pains to have it so, sowed better, threshed better, had neater fences and gardens, and nicer looking rows of trees, and in fact a man who had a straight furrow kept straight himself, and, in summing up, the young ladies fell in love with the best plowmen. He went on to say that now people are recognizing the importance of plowing matches—the towns were encouraging them because they knew it would help them. Good farming will make this a good country—and it is making it. The great grievance of the loan companies to-day is that the farmers are paying off mortgages, and it was because the farmers are learning to farm as they should farm, that they are able to do this, and plowing matches are going to help. The Farmer has repeatedly pointed out that the plowing match would be a great help to fertility, but it was nobody's business to set the ball a-rolling, and it was left to a half-dozen leading spirits in the little farmers' institute at Blyth to take up the idea and stay with it till it has attained such a measure of success that it requires no gift of prophecy to predict that a good few bigger places will follow their lead. Wawanesa makes a very good second to the sister institute in its devotion to the same good work. But if there were twenty more, as we expect there will soon be,

Blyth deserves and will get the honor of first starting and carrying on year by year a popular and successful plowing match. None of his co-operators in this good work will deny to J. C. Noble, secretary of Blyth Institute, the honor of having been the main worker in this desirable effort. Three years ago a very modest beginning was made and equally modest prizes offered. Last year a great advance was made, and the business men of Brandon especially deserve high praise for the liberal aid they have all along given to the committee. They gave freely and came in scores to visit the field of action, and from far and near farmers, their wives and sweethearts make it a pleasant holiday. This year's match was held on an ideal picnic ground. The farms of Messrs. Noble and Charleson lie on a low bit of land, round which flows the Assiniboine, and well sheltered by a high bank from north winds. Both gentlemen are tasteful in their gardens and grounds. The field in which the plowing was done was barely equal in quality, the gang plows getting a rather gravelly piece to work on. The ladies of the institute provided a liberal lunch and supper for the workmen and visitors, and the day was fine. There was a very large turnout of well-appointed vehicles, showing the comfortable circumstances of the farmers of the district. Many of the teams were tastefully groomed and harnessed, and there were over 50 entries in the various classes, principally in the 14 and 16-inch walking plows. The awards were as follows:—

Men's class, 14-inch walking plow. Judges, A. Nichol and A. Wilkie:—1st and gold medal, H. Hamilton, Douglas; 2, W. Croy, Brandon Asylum; 3, James Sutherland, North Brandon; 4, William Turner; 5, P. McIlvride, Brandon; 6, F. W. Doubt, Douglas; 7, W. Elder,

Rounthwaite; 8, T. Elder, Rounthwaite. Men's class, 16-inch walking plow. Judges, Jas. Jackson and Fred. Thornton:—1st and gold medal, Jas. Mayhew, Wawanesa; 2, And. Elder, Rounthwaite; 3, Frank Baker, Brandon Hills; 4, John Stott, North Brandon; 5, Geo. Charleson, Blyth; 6, W. J. Dunseith, Brandon; 7, W. H. Reid, Brandon.

Young men's class, under 21 years, 14-inch walking plow. Judges, H. Nichol and R. Reid:—1st and silver medal, J. W. Taylor, Fairfax; 2, Alan Tran, Brandon; 3, Geo. Bowles, Brandon Hills; 4, R. Tran, Brandon; 5, J. Noble, Blyth; 6, Bert Barrager, Rounthwaite.

Boys' class, under 16 years, 14-inch walking plow:—1, D. Charleson, Blyth; 2, Geo. Elder, Blyth; 3, Sam Maher, Blyth; 4, Bain Elder, Blyth.

Sulky plow, 3 horses:—1st and silver medal, W. L. Johnson, Brandon; 2, John Sutton, Rounthwaite.

Four-horse gang plow. Judges, Geo. Halse and Robt. Smith:—1st and silver cup, D. Foster, Douglas; 2, M. Roddick, Brandon Hills; 3, W. J. Elder, Rounthwaite; 4, Thos. Baker, Brandon Hills.

Twelve-inch gang plow, 3 horses:—1st and silver cup, F. Elder, Rounthwaite; 2, D. Wyton, Blyth; 3, John Empey, Brandon.

For the best start and finish, James Sutherland got sweepstakes.

For the best kept and harnessed team, 1, W. White, North Brandon; 2, A. F. Elder, Rounthwaite.

For best handled team, 1, W. White; 2, D. Gliddon, Chater.

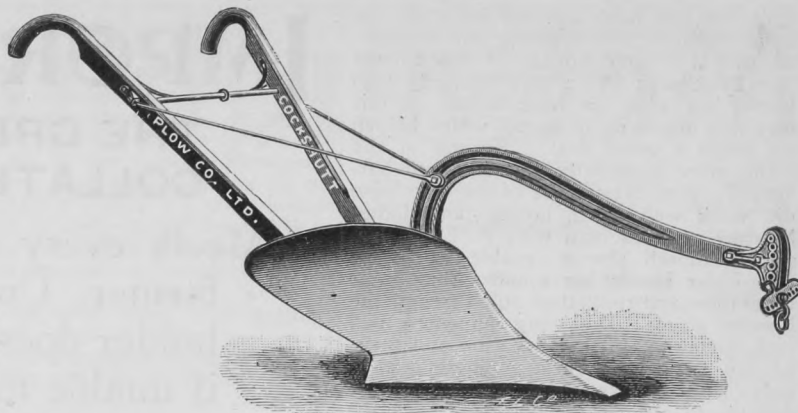
For best team, 1, W. H. Reid; 2, A. Elder.

As will be seen from the prize list, the different branches of the Elder family did remarkably well, and Bain Elder, a school boy, with only a few days' experience at the plow, did very good work indeed.



# Cockshutt Plows

DO THE BEST WORK.  
LIGHTEST IN DRAFT.  
LAST LONGEST  
CAPTURED TWELVE PRIZES AT  
THE BIG PLOWING MATCHES AT  
BLYTH AND OAK LAKE.



## The Cockshutt High Lift Gang

LEADS THEM ALL—THE NEWEST, LATEST AND BEST GANG PLOW MANUFACTURED.

### COCKSHUTT PLOW CO., LTD.

WINNIPEG.

BRANTFORD.

The prizes offered were all on the ground and ticketed with the names of the donors. Among the visitors may be named Messrs. Fraser and Fowler, M. P. P.'s; S. A. Bedford, H. McKellar, Winnipeg, who, at the invitation of President S. Thomson, gave short addresses in the afternoon, eulogizing the work of the institute, the work of the men and the quality of the teams, some of which were very fine and well trained.

#### Oak Lake.

The local institute has made its first year's essay in this field, and has very good reason to be satisfied with its success. Twenty-three plows started, and the average of the work done was highly creditable to the workmen of the district. Some of the crack hands from Brandon put in an appearance, but the best of them, in spite of their three previous years' experience, were, as the prize list shows, very hard pressed by the home men, who had the disadvantage of knowing next to nothing of the niceties of plowing by points. The ground was good, but very hard and dry, but in the work done this drawback was very little noticeable. The place of meeting was the farm of Mr. Jas. Coulter, alongside the C. P. R. track, about three miles east of Oak Lake, and the committee of management had the lay out of the work well under control. The judges, whose carefully weighed decisions gave general satisfaction, were Messrs. K. McIvor, Virden; Thomas Jasper, Bradwardine; A. Milne, Hamiota, and Gray, Brierwood.

Of the youths, 17 to 20, first place went to D. A. Goodwin, second to Alb. Walton, both of Oak Lake.

In 14-inch walking plows, 11 entries, the honors went as follows: 1. Jas. Sutherland, Brandon; 2. Jas. Goodwin, Oak Lake; 3. John Stott, North Brandon; 4. Geo. Mawer, Griswold; 5. Thos. Hill, Brandon; 6. Jas. Smith, Oak Lake; 7. Wm. Wisner, Oak Lake; 8. Jas. Gillespie, Oak Lake; 9. W. Leathong, Oak Lake.

In this very keen competition the well-trained horses of the first prize man, the easy gait of Gillespie, the oldest man in the crowd, and an untried competitor from old France, John Chouvalon, were generally admired.

In 16-inch gangs, the order of merit was as follows: 1. P. McIlvride, Brandon; 2. Robt. Low, Griswold; 3. John

Goodwin, Oak Lake; 4. Alex. Reid, Brandon; 5. John Hogg, Oak Lake.

In gang plows: 1. Jas. Black, Oak Lake; 2. A. Gillespie, Oak Lake; 3. Nelson Bannister, Oak Lake.

Sulky plows: 1. D. Cameron, Oak Lake; 2. Robt. Alford, Oak Lake.

Special for best feering: J. Goodwin.

Special for finish: Geo. Mawer.

Sweepstake for best plowed acre on the field, James Sutherland.

Oldest plowman, D. Cameron, Oak Lake.

Youngest plowman, D. A. Goodwin.

There was a very large turnout of visitors, and an expression of interest that ensures keener competition and more hearty support for next year's match. While waiting for the awards, the president, Mr. Arsenault, called on some of the best known visitors to address the crowd. This was very happily done by the member for the county, Mr. Norris, M. Fenwick, Griswold, one of the competitors, and others. All expressed their gratification at the success of the meeting, the good work done, and the prospect of a greatly increased interest in next year's contest. The members of the institute and Messrs. Arsenault and Young, president and secretary, had a busy day, and deserve praise for their arrangements generally.

#### Wawanesa.

The last of the local matches for June was held on a field half way between Methven and Wawanesa. The soil was in some parts all that could be desired, as regards fineness, but ran rather firm elsewhere, and this made considerable difference in the look of the work when finished. Some men began their feering too deep, while those with more experience in such competitions made a much more successful start. The very worst looking bit of work was straight, and the weeds well covered, and on the finer soil some very pretty work was turned out. The feering, covering and finishing of J. Leitchman from Wawanesa, had many admirers, and as he happened to get a good place in the field, it looked as if he would take the sweepstakes. The effect of competition is being felt already even here, and though the highest honors went to an old country man from Brandon, there were several men who pressed him very hard. Tully Elder, a well-known local man, had a poor

## Medal Brand Wire Edge Ready Roofing

MANUFACTURED BY—

The Mica Roofing Co., of New York.

Can be used on roofs of any pitch. Is insured at same rate as metal roofs. Any ordinary workman can apply it. Costs less than any other roof. Will outwear all other roofs. Write for samples.

Wholesale  
...Agent

JOHN M. O'LOUGHLIN,

Sanford Block, Winnipeg.

When writing advertisers, mention The Farmer

## EGGS FOR HATCHING.

Barred Plymouth Rocks,  
Buff Plymouth Rocks,  
S-C. Brown Leghorns,  
Black Langshans,  
Silver Spangled Hamburgs.

ALL  
PRIZE  
WINNERS.

\$2 for 13, \$3.50 for 26. Stock for Sale

JOHN TODD & CO., 457 Henry Avenue,  
WINNIPEG.

## ..MANITOBA.. FARM LANDS

FOR SALE OR RENT

IN THE BEST DISTRICTS AT

LOW PRICES AND ON  
EASY TERMS.

Send for Lists and Map to—

R. J. SHRIMPTON

228 Portage Ave., WINNIPEG, MAN.

When writing advertisers, mention The Farmer

plow and bad land, and did not reach the usual standard, finally going out unfinished, with a broken mould. It was noticed that Leitchman had a very unsteady land horse, but what his team lacked in this way they made up in speed, which helped his finish a good deal. Several of the teams were beautifully groomed and harnessed. Wm. Neish, one of the boys, also did work well worth noting, and James Murphy, a hired man with P. Elder, has shown himself also a capable workman. The Elder family has a more than local reputation and took their full share of the honors going. The gang plowmen had luck somewhat in their location and turned out very fine work. There was a heavy shower overnight, which made it difficult to clean the plows, and an hour before closing time more rain fell, making the field very uncomfortable for visitors and late finishing plowmen. The committee of this institute has had difficulties to overcome that the sister institute at Blyth escaped. Their last year's expenses were heavy and fewer outside contributors could be got to assist, but the municipal council contributed \$40 to their funds, and though a little handicapped at the start, this institute has good reason to be proud of the success it has achieved and the marked improvement it has already made on the practice of the district in regard to plowing. The president and secretary, Messrs. Nasmyth and Johnston, have done a great deal of hard work in bringing this match to a successful climax and may well be congratulated on the successful turnout, 42 plows in all, at this their second plowing match. The prize list is as follows:—

Walking plow, 14 inches—1. Jas. Cory, Brandon; 2. A. T. Elder, Rounthwaite; 3. W. I. Elder, Rounthwaite.

Walking plow, 16 inches, previous first prize winners excluded—1. Thos. Murphy, Blyth; 2. Geo. Charleson, Blyth; 3. John Bain.

Walking plow, 3-horse team—1. Wm. Reid, Brandon; 2. John Mayhew, Wawanesa.

Boys, 17 and under—1. Wm. Neish, Wawanesa; 2. Geo. Elder, Blyth; 3. Fred Wells, Wawanesa.

Gang, open to all—1. Jas. Ross, Wawanesa; 2. Neil Phillips, Wawanesa; 3. Frank Elder, Blyth.

Sweepstakes and gold medal—James Cory, Brandon.

Finest team—John Stott, Brandon.

Judges for Classes 1 and 2, James Henderson and Robert Reid, Brandon; for Classes 3, 4 and 5, Fred Thornton, Brandon; Thos. Gibson, Belmont.

#### A Tussel for the Championship.

The committee of the Brandon Institute has arranged to hold a deciding match on the Experimental Farm, to which all first prize winners of 1896, '97 and '98 will be invited to compete for the championship of Central Manitoba. It will be held on Wednesday, July 6, in connection with the Farmers' Institute annual picnic, and will undoubtedly be the most notable plowing match ever held in Manitoba. Valuable second and third prizes will be given. Each competitor will be required to plow from half to three-quarters of an acre, with a 14-inch walking plow. As at all local meetings, both men and horses will be amply provided for and those from a distance will be accommodated over night. There will be a pretty big crowd of witnesses and visitors, who will get a good idea of the quality of the work that can be done by some of the best workmen in Manitoba. The contest is not only between the farmers and their men as to who shall make the best work. The im-

## IMPORTANT,

### THE GREAT WEST LIFE COLLATERAL SECURITY POLICY

Meets every requirement of the Western farmer. Under its provisions the policyholder does not lose the premiums paid, if unable to keep up his payments after the third, or succeeding years. Further, the policy is so drawn that it may be used by insured as security for a loan third year, and the amounts the Company guarantees to loan insured are printed on each policy.

The Guaranteed Cash Value is larger than that of any other Canadian Company, and the Profits Paid in Addition thereto are sure to exceed those of Eastern companies.

After the First Year the Policy is Incontestable.

plement men are making a big hustle to get out their best tools in the hands of the best workmen, of course with the view of showing that the plows they offer are the best in the market. Some murmuring has already been stirred up against this practice and also against men, not regular farmers, competing. But if a man of that sort can beat one who is in every day practice, the best way to close him out is to try and improve your own work till he goes under. And if it can be shown that one peculiar make of implement does better work than its rival, then it is quite proper to demonstrate the fact there or anywhere.

In a recent trial in connection with the oleomargarine law the Messrs. Armour submitted in evidence that each hundred pounds of their oleo, which is the foundation of their margarine, contained 34 lbs. of neutral lard, 27 lbs. of oleo-oil, and 12 lbs. of cottonseed oil. This means that 46 pounds, or nearly half, of this imitation butter is made up of the fat of the pig and cottonseed oil. To the former there can be no objection, as it is a cheap wholesome material. But of the latter the less we have the better, and we would be sorry indeed to have to commend it to the public.

Strange, but sometimes we have to go away from home to find out a good thing. The British farmer is experiencing this just now. The consumption of bacon and other pig meats is reaching such proportions of late years as to attract his attention. Strange, but the report is that on awakening to this fact he finds he has not got the right class of hogs to cater to the market to the best advantage. The English packers complain of this. This is indeed a surprise, for England has always been looked upon as the home of the bacon pig. Where there are so very many different varieties of pure bred pigs, and where each section has its favorite breed, and where they are so largely bred for pure bred purposes, it will be difficult for the farmers to do anything extensively with bacon pigs.

## GRAND JEWEL



SHOWING  
PATENT  
DOUBLE  
FLUE

- 1 STOVE FRONT
- 2 HOT AIR SPACE
- 3 OVEN FRONT
- 4 OVEN BOTTOM
- 5 STOVE BOTTOM

SEE OUR

## Grand Jewel Exhibit

IN THE  
MAIN BUILDING,

CANADA'S GREATEST STOVE

And judge for yourself.

### CAMPBELL BROS.,

538 Main Street,

WINNIPEG.

### F. TORRANCE, VETERINARY SURGEON

Graduate of McGill University. Diseases of animals treated scientifically. Surgical and dental operations a specialty.

Office: 214 James St., Winnipeg.  
Telephone 295.





While our columns are always open for the discussion of any relevant subject, we do not necessarily endorse the opinions of all contributors. Correspondents will kindly write on one side of the sheet only and in every case give the name—not necessarily for publication, but as a guarantee of good faith. All correspondence will be subject to revision.

#### Rotary Disc Plows.

H. C., Cochrane, Alta.:—"What is known in Canada about the Spalding-Robbins rotary disc plow? What is the draught as compared with an ordinary walking plow? Will it cut prairie sod in place of a breaking plow? Has anyone tried them in Manitoba?"

Answer—The rotary disc plow was built to work a sticky soil in Texas, in which the ordinary plow would not clean under certain conditions. It has been tried in other soils with varying success. We know nothing of the plow you mention, nor can we find out anything about it. There are, however, several firms handling

sell again to-day, and may not get more than 16½c., if that much, and some of the stores are paying 16c.—in trade, of course. After taking out operating expenses, to say nothing of interest on debt or investment, it is impossible for us to pay the patrons anything like what they are supposed to get at the stores, consequently they pull out, and when they are all out, or the creamery closes, the store-keepers will be able to compensate themselves for past losses, and then I suppose everyone will cry out upon us for closing the creamery.

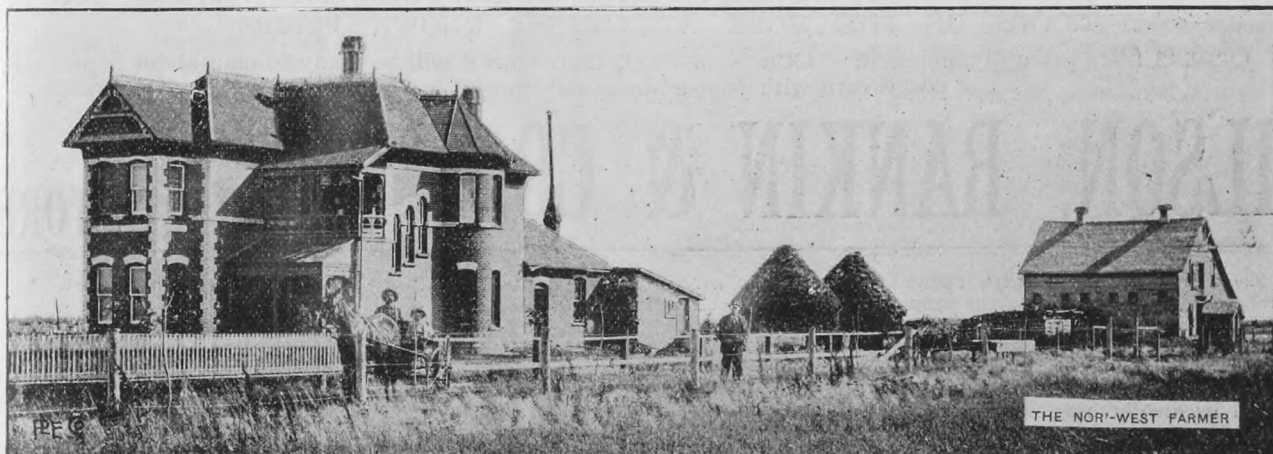
"If, on the other hand, dairy butter is really worth what is being paid for it (and the store-keepers claim that it is, and that they can sell at the prices they are paying in goods), then the dealers are not paying what creamery is worth, or else it must be admitted that a promiscuous lot of store butter is just about as good as an equal quantity of the best creamery. In that case, it is a great mistake to operate creameries at all, as the home product can be, and is, manufactured much more cheaply?"

Note.—The mystery propounded by our correspondent is not so much a mystery as at first sight it looks. It is pretty certain that the butter bought at or near factory prices was sold by the merchant to the wholesale dealer at 14c. The dif-

ference of the soil, the excess of deleterious compounds and lack of profitable vegetable matter, common to most such soils, make it a very unprofitable thing to work on them. It may be worth while to manure pretty freely—if you have no better use for your manure. But if you have any quantity of good land outside those gumbo spots, let them alone. If not, get out of that to where there is good land to be had for little or nothing.

#### Pasturing Weeds.

John Brander, Nesbitt, writes The Nor'-West Farmer:—"In your issue for May (Correspondence Department) appears a valuable article by Mr. Alex. McLay on how he so easily and satisfactorily summer fallowed ten acres of his land. His method being to turn in a few sheep after the ground was fenced, not even plowing all the land, but simply disking a part of it and spring plowing part. Then the article goes on to show the result which he says was excellent. I am sorry that Mr. McLay did not tell us how many sheep the ten acres pastured, and also how much wheat to the acre he had of a return. What one man would call a "fine" crop of wheat another man would not; hence we know but little of what his returns really were. How to summer fallow is a subject that we all ought to study,



Farm Home of Robert Lyons, Carberry, Man.

disc plows in Manitoba, and a full line of them will be on exhibition at the leading exhibitions. We understand a disc plow has been tried at Brandon on the Experimental Farm, and that it did good work. One point in its favor was that it thoroughly covered all weeds and left a fine surface. We would be pleased to have Superintendent Bedford's opinion of the work done by the plow. As far as we can learn, it will cut prairie sod all right, but it is meant to handle stubble land. The draught is generally heavier than that of a walking plow of the same width. We would be glad to have the experience of any farmer who has tried these plows.

#### Factory vs. Home Butter Making.

A creamery patron writes as follows:—"We are sending our cream to the creamery this summer, but my private opinion is that we may find it necessary to close the creamery before the end of the season. We are not making half the quantity which the number of cows in the district warranted us in believing we should make. The principal reason of this is that our stores are giving very nearly as much for dairy butter as we can get for creamery. For instance, we sold our output of creamery two weeks ago at 17½c., and at that time the stores were giving 17c. We

ference is more than made up to the storekeeper by the profit on the goods given in exchange. The same thing is being done wherever there is a creamery, and if, as is almost always the case, a proportion of inferior butter is taken in at the same price, it becomes pretty clear that the storekeeper is either putting a very high value on his trade goods or is trying to kill the competition of the factory, which pays dry cash and allows the farmer to go with that wherever he can spend it to the best advantage. As the writer suggests, it is not easy to ride two horses to advantage, and the farmer is pretty sure to drop down between them. To kill the factory system it is not necessary to go out with a club, all you need is to bleed it of a sufficient number of its supporters to make it a losing concern, and you are then once more in the hands of the trader and will get no more for the best butter you can make than your less careful and competent neighbor gets for what may in time go to make axle grease.

#### Gumbo Soil.

A "Mossback" at Agricola, Alta., wants advice how to cultivate gumbo. Our advice is the same as Punch gave to those about to marry: "Don't." The texture

and study as intelligently as we can. I know nothing of sheep in this particular, but I have had a little experience with cattle and horses pasturing on the summer fallow. Some years ago I had a few head of stock which I used to let out to some person to herd and pay annually a sum ranging from \$12 to \$25 for such herding. This money, you will observe, fell due in the fall, when money is the most plentiful with the farmers. I being a member of a farmers' institute, had many opportunities of hearing Mr. S. A. Bedford and other practical farmers speak on such subjects as the above, I resolved on a new course of procedure. Like too many other farmers, I had little or no money to invest in the spring, and hence could not well buy wire to fence in the summer fallow, so that I could keep my stock at home, and thus be out of pocket in more ways than one. 1st. I lost all the pasture that grew on my fallow each year. 2nd. I did not get the stock to tramp the ground down solidly, and thus not have the ground in as good shape for the next crop, and hence had to put up with a comparatively poor one. 3rd. I had to harrow more in order to keep the weeds down. 4th. I had to pay out the cash for the herding of the cattle and colts. It seemed, therefore, to be wisdom (when I had not the cash) to contract a debt of

# A GIGANTIC JULY ....CLEARANCE SALE AT.. Brandon's Greatest Store

It is a Sale Extraordinary—in magnitude and enthusiasm—typical of this Store's achievements. There is good reason for the enormous selling here. The dependable class of goods we carry is well known throughout Manitoba, and when a reduction in price, such as we are giving this month—amounting in many instances to a third and even a half—there is a royal response from all quarters.

**People Have Come a Hundred Miles and Over:**

**To Buy  
To Buy  
To Buy  
To Buy** } **FURNITURE,  
DRY GOODS,  
CLOTHING,  
CARPETS.**

**Why Not You?**

Thousands more will visit us before the end of July. It will pay you big interest in dollars saved. The Best Up-to-Date Ready-made Clothing selling at two-thirds its regular value.

**\$5, \$6 and \$7 Suits Selling for \$3.90. Instead of \$10, Now \$6.50. Instead of \$12 and \$14 now \$10. LADIES BLOUSES: Values up to \$1.25, the Last of the Best Selling Lines, Your Pick, 50c.**

**GOODS OF THE HOUR AT LOWEST KNOWN PRICES.**

MAIL ORDERS filled promptly and well. OUR NEW FALL CATALOGUE will be ready to mail about Sept. 15th, a postal card with your address will bring it to you.

## WILSON, RANKIN & CO., BRANDON'S ..GREATEST STORE.

\$15 or \$20 a year for fence wire rather than for herding—the debt being the same amount—and fence a part, if not all, the fallow land and keep my stock at home. If this course is kept up for a few years, any reasonable person can understand that I will eventually have my farm all fenced and not be out any more money than if I had not fenced any. The cost, then, is nil, excepting a little work, which can be done at my convenience. Having the farm so arranged that the stock can come to the stabling from any part on the farm, you may easily see that the one watering place will do as well as the one shed in which the stock can lie during the heat of the day.

"We are occasionally told that experiments should be confined to such places as the experimental farm, where they have plenty of time to look after them. Let me mention a very simple one I tried last season on my own account. I only fenced a part of my fallow; part of it I harrowed twice, and part I just plowed. Most of us, doubtless, observed that the early part of this season was very dry, and to make matters worse the ground was dry to start with, consequently the seed had a poor chance to come up evenly. On the part of my fallow that was pastured last summer it came up beautifully, the part that was harrowed not nearly so well, there being more or less dead weeds lying on top to keep the drill from working well; and the part plowed only came up poorly, and has looked poorly ever since, while the part pastured has looked clean and healthy all the time, and to-day, although the last sowed, is by far the highest and thickest of any I have. Now, Sir, what more need I say? Does not the lesson apply itself?

"One word more. This year I fenced in my 55 acres of fallow with about \$21 worth of wire (\$2.60 per cwt.), putting

two strands of wire on. This amount was all that was necessary, as I moved an old fence of two strands, 55 rods long. The fallow is now fenced on three sides, the fourth being the old pasture field."

Note.—The Alberta district as a whole is liable to produce too rank growth, and in ordinary seasons land plowed deep after it has been pastured by sheep, would be very likely to grow rank and get frozen long before it had time to ripen. But, by merely stirring the surface with a disc, there is less liability to excessive straw growth and the wheat ought to ripen several days earlier. Perhaps Mr. McLay will be good enough to explain if this is his general experience, and if last year the plowed land ripened as early as the other, and what the yield was. The farmers on the Portage plains regularly pasture their fallow land with cattle and horses, both before and after plowing, but there is very little land elsewhere of exactly the same texture as theirs, and what is best there may not suit so well in other districts.

### Dealing with Alkali.

R. C., Solsgirth:—"I notice "Enquirer," Dauphin, asking for a method of cultivation to reduce the alkali in land. I have heard that a crop or two of buckwheat grown and plowed under when in blossom will help a very great deal. Have you ever seen it tried, or do any of your readers know anything about how it works?

Answer—We have heard of this method, and it is not unlikely such land may do fairly well under buckwheat, but so far as known to us it has not yet had a trial in Manitoba. If the buckwheat does grow, there is no apparent necessity for plowing it into the land. Has any one of our readers tried buckwheat?

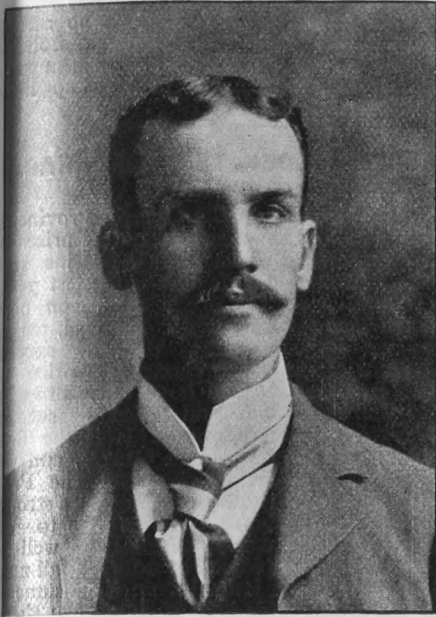
### Alkali in Drinking Water.

This question raised by a Dauphin subscriber was referred to Prof. Shutt at Ottawa. In his report for 1893, he dealt with that subject. To one part of the saline water he added two of lime water. This was allowed to settle and the clear water on top run off. This was filtered and the water exposed in a shallow dish for ten days. It was still a little hard, but quite free from unpleasant taste of salts. "Enquirer" may test this plan for himself, and see how it works. On pages 154-5 of experimental farm reports for 1893 the full account of these experiments will be found.

### Valuable Information Free.

G. B., Birtle, writes:—"An article on page 270 of the June number of The Nor'-West Farmer dealt with the handling of specimen plants which one might wish to send to the Central Experimental Farm for identification, or for further information. This is a privilege which the experimental farms hold out to the farmers of which comparatively little advantage is taken. In not a few places have I come across those who have allowed some noxious weed to get into their crops and overrun their land because they did not know the plant and supposed or hoped that it was nothing bad. Their suppositions or hopes did not keep the weeds down just the same. In many places, through ignorance of the nature of the plants, entirely wrong methods of cultivation have been resorted to to eradicate some unidentified foe, and it has become even worse than before. The fact is that a great many of the advantages which might accrue to the farms through the government farms are not taken hold of at all, and men go on acquiring by experience—sore experience, oftentimes, too





**T. A. Graham, V.S., Claremont, Ont.**

Judge of Heavy Horses at the Winnipeg Industrial, 1898.

—much of the knowledge which a little trouble or study would have given them 'ready to wear.' As long as the mails carry packages and letters of this nature free of charge, and the government staff



**Jos. Featherston, M.P., Streetsville, Ont.**

Judge of Sheep and Swine at the Winnipeg Industrial, 1898.

furnish information to farmers for exactly the same price, nobody who is at all discreet should go long without knowing the why and the wherefore of anything that seems to be at all suspicious."



**J. F. Quin, V.S., Brampton, Ont.**

Judge of Roadsters, Standard Bred and Carriage Horses at the Winnipeg Industrial, 1898.

#### Silo in a Bank.

J. W., Foxwarren: — "How do you think it would work to make a sort of cheap silo by excavating a mow into a good dry knoll, to be packed as closely as possible with green oat sheaves or other green feed, and then covered air tight with lumber on the top?"

Note.—No doubt such a silo would save green feed very well. Pits were used by the Romans for saving green feed. Similar pits have been used in Germany and France for saving beet tops, etc. In fact, it was the use of the pits for saving brewer's grains and other feeds that gradually led to saving corn in pits in the ground, then to our modern silo. To attain the best success, a depth greater than an ordinary pit will be necessary. Unless a depth of fifteen or sixteen feet can be obtained it will be necessary to weight the contents to ensure best results. Barrels, sacks, or boxes, filled with sand or gravel, would make good weights. The shallower the silo the greater the weight. The trouble of taking out each feed, as it was wanted, and the extra cost of excavating, led to the erection of silos above ground. The French use pits to-day, and a description of one of them may be in place.



**G. W. Clemons, St. George, Ont.**

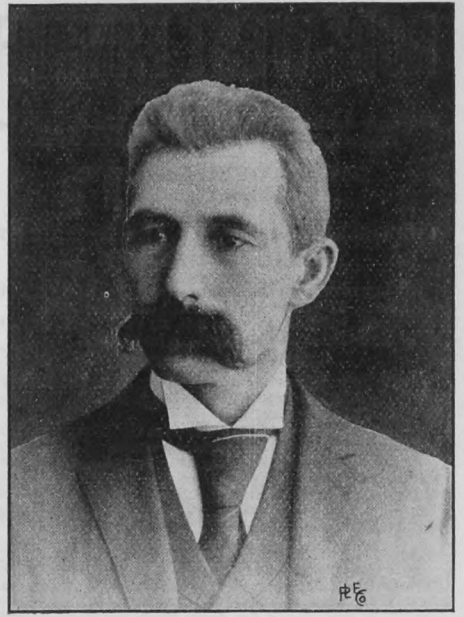
Judge of Dairy Cattle at the Winnipeg Industrial, 1898. Mr. Clemons is Secretary of the Canadian Holstein-Friesian Association.

The Comte de Chazelles has one that has been in use for many years. It is nothing more than a trench, only 130 inches deep. Green stuff is put in this and rolled down with a heavy roller drawn by a pair of oxen. When filled, it is covered with two feet of chaff and then a layer of two-inch plank and on top of this a covering of two feet of earth, with the roof sloped on both sides to shed rain into a ditch on each side.

We would caution J. W., if he tries this silo, to put in his green oats as quickly as possible after they are cut. Such feeds do not contain as large a percentage of water as corn, and if allowed to dry out some before being put in the silo will be too dry to save to the best advantage.

#### Cheap Farms.

W. D. Lamb, Plumas, writes:—"I am sure you have as many subscribers to your paper here as has any other town in the province in proportion to its size. Nearly every farmer takes it. This is but an index of the intelligence of the people in this district. They are satisfied that yours is the best agricultural paper, and that this is the best agricultural district in the province for mixed farming. There are many good farms in this district that can yet be bought very cheaply, near



**M. H. Ten Eyck, V.S., Hamilton, Ont.**

Judge of Hackneys, Thoroughbreds and Ponies at the Winnipeg Industrial Exhibition, 1898.

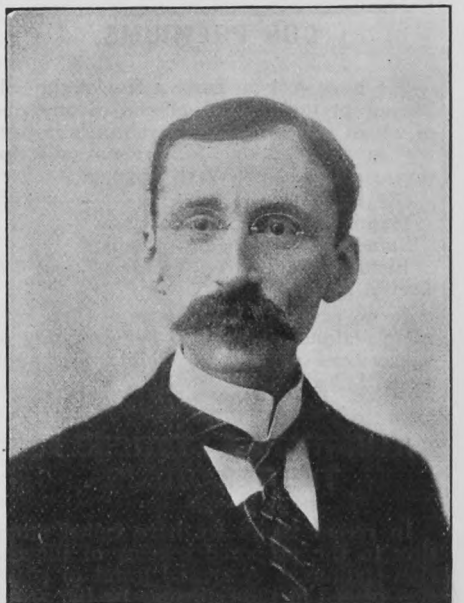
markets, at almost wild land prices, and on favorable terms. While such is the case it certainly is a little rash for some to wait till the Boyne marsh is drained, or some new district gets railway facilities. Let any who need a farm at a



**Sharpe Butterfield, London, Ont.,**

Judge of Poultry at the Winnipeg Industrial, 1898.

poor man's price communicate with friends or acquaintances here, or the post-master, enclosing stamp, and I have no doubt but they would be led to find the desire of their hearts, viz., a good farm at a poor man's price."



**Prof. E. H. Farrington.**

Judge of Dairy Products at the Winnipeg Industrial, 1898. Professor of Dairy Husbandry, Madison, Wisconsin.

# THE NOR'-WEST FARMER

ESTABLISHED 1882.

The only Agricultural Paper printed in Canada between Lake Superior and the Pacific Coast.

THE STOVEL COMPANY,  
PROPRIETORS.CORNER McDERMOT AVE. AND ARTHUR ST.  
WINNIPEG, MANITOBA.

SUBSCRIPTION to Canada or the U.S., \$1 a year, in advance. To Great Britain \$1.25 (5s. sterling). Agents wanted to canvass in every locality, to whom liberal commissions will be given.

## ADVERTISING RATES.

Transient advertisements, for less than three months, 15c. a line (each insertion). Terms for longer periods on application.

All advertisements estimated on the Nonpareil line—12 lines to an inch. A column contains 128 lines.

Copy for changes in advertisements should be sent in not later than the 20th of the month to ensure classified location in the next month's issue. Copy for new advertisements should reach the office by the 30th of each month.

## TO OUR SUBSCRIBERS.

It is the intention of the publishers of this paper to admit into their columns none but reliable advertisers, and we believe that all the advertisements in this paper are from such parties. If subscribers find any of them to be otherwise, we will esteem it a favour if they will advise us, and we will at any time give our personal attention to any complaints which we receive. Always mention this paper when answering advertisements, as advertisers often advertise different things in several papers.

## LETTERS.

Either on business or editorial matters, should be addressed simply "THE NOR'-WEST FARMER, Winnipeg," and not to any individual by name.

## Look at Your Subscription Label.

When you pay your subscription, watch the name label on the next two issues which you receive. On the first issue following payment, it might not give the correct date—the type-setting machine may make an error and the proof not be corrected before mailing day. But if the date is not correct on the SECOND issue please notify us by postal card.

Look at the date label now. Are you in arrears? Are you "paid up" to the present date? The label will tell you. If in arrears, please renew promptly.

WINNIPEG, JULY, 1898.



## OUR PREMIUMS.

We have still on hand a few of the following premiums, the choice of any one of which will be given to subscribers paying in advance one full year's subscription to The Nor'-West Farmer:—

Gleason's Horse Book.  
Manning's Cattle Book.  
Standard Cyclopaedia (5 vols.)  
Pictures of "Queen Victoria" and "A Pretty Rural Scene."

In no case will we dispose of these premiums alone. They will be sent only to subscribers paying the full subscription price, \$1.00.

ILLUSTRATION STATIONS FOR  
THE TERRITORIES.

In recent issues we have called attention to the proposed scheme of illustration stations. A special grant of \$5,000 was placed in the estimates by the Dominion Minister of Agriculture to begin the work of establishing these stations. Although this item had passed the agricultural committee of the House, it was rejected by the House as a whole and laid

over until another year. There are certain districts of the country that are greatly in need of just such work as it was proposed to do at these stations. In new sections of the country, especially in districts which have been settled by foreigners, there is often great ignorance as to the best methods of caring for and handling stock, growing the best crops, feeding them, and handling milk. This has been especially noticeable in districts supplying cream to the creameries in the Territories. The value of the work that could be done in some of these districts is simply inestimable. In fact, the absolute necessity for some educational effort has become so apparent, that in the interest of the creameries as well as of the patrons, Prof. Robertson has decided to start instructive work in a small way at a number of the creameries, under the auspices of the dairying service. While in the Territories last month he made preliminary arrangements for beginning this work at a number of creameries. The object will be to show how to grow the best foods, how cows should be fed and cared for to give the greatest profit, how to care for the milk so as to give the best quality of cream and butter, and to show the value of skim-milk for raising calves.

## THE INDUSTRIAL EXHIBITION.

Once more the season is at hand around which so many of the stock breeder's operations swing. As soon as the exhibitions are over the stock breeder begins to lay his plans for another year, and only he who is beforehand in this work need look for success. The day of trial is near at hand, and the competition this year will be the keenest and largest ever seen at the Industrial. Quite a number of stock breeders from Ontario and from the United States have signified their intention of exhibiting this year, and the number from the Province and Territories will be much larger than ever before. The entries show that exhibits of horses, cattle, sheep, swine and poultry will be made by many new men, in fact, it is roughly estimated that 50 per cent. of the exhibitors in the stock classes will be new men. The exhibition of farm implements and machinery will far exceed anything ever seen in past years. Implement firms from the United States, who have never sent their goods here, will be well represented. The growth of the exhibition has been exceedingly rapid since its inception in 1891, and there have been a number of very successful exhibitions, but that of 1898, at the present date, promises to outclass all its predecessors. The grounds, too, have been greatly improved, spacious sidewalks have been laid connecting all the buildings, and a large new judging arena, with raised seats around it, has been erected. We feel sure this will be greatly enjoyed by those who wish to watch the judging in the ring. Additions and improvements have been made to other buildings so as to afford the increased accommodation required, and an addition to the grand stand makes it now capable of seating 9,000 people. The attractions on the stage before the grand stand and the fireworks in the evening will be of the best, and altogether the exhibition promises to be unsurpassed. Reduced rates have been secured on all railways. Ample accommodation is being arranged for in private houses in the city, so that no one need stay away for fear of not having a place to sleep. The opportunity of seeing the best the country can produce, and of comparing notes with others, is one that no farmer, farmer's son, wife or daughter should miss. The exhibitions are great educational institu-

tions, and if taken in the right way should be of untold value to those who attend them. A day or two's rest and holiday attending the exhibition will send anyone home better prepared to take up life's battle.

## FIRST BLOCK TEST IN CANADA.

The directors of the Ontario Provincial winter show have decided on the prizes to be awarded. Those in the swine sections show some change from last year. This year all the prizes for bacon pigs have been grouped under one head, which is an improvement. But the special feature of the swine classes is a prize for the two best dressed hogs to be brought to the show alive and killed the second day of the exhibition. This is the first block test ever made in Canada, and we hope it will not be the last. The Provincial winter show is getting on a strong footing, and should soon be able to add block tests of cattle and sheep as well as pigs. We are pleased to note that all animals are to be judged from a consumer's standpoint. This is as it should be; there is no room in a fat stock show for fancy points, so dear to the eye of a breeder, if they conflict with utility.

## MANITOBA CHEESE FACTORIES.

In a recent circular letter C. C. MacDonald, provincial dairy superintendent, calls attention to the fact that produce dealers are complaining that some of the cheese factories are shipping their cheese too new for consumption. In one case that came under his own notice the cheese was shipped when only four days old. This is a most serious mistake, and one which will injure the good name of Manitoba cheese. Cheese should not leave the factory until 20 days old. The temperature in the curing room should be held as near to 65° as possible, even if it is necessary to put in a stove to keep up the temperature during cold evenings. Cheesemakers should use nothing but the best of material at all times. The greatest care and precaution should be exercised at all times to keep everything about the factory clean. The curing room requires special attention. Cheesemakers are interested in the reputation of Manitoba cheese, because it affects their own reputation. Patrons are also interested as well as the produce dealers, and should see that these mistakes do not occur.

CATTLE AT THE OMAHA  
EXPOSITION.

On the 1st of June, by touching a button, President McKinley opened the great Trans-Mississippi and International Exposition. It is centrally situated and should be a great success. Canada will be officially represented and will have a building of her own with an exhibit representing the agricultural, manufacturing and mining resources of the country.

The cattle show will be held Oct. 3rd to 20th. All entries must be made before August 10th, and all animals must be the property of the exhibitor for at least 30 days prior to that date. Exhibitors are restricted to two entries in each class. The cattle must be on the grounds the first day of the show. Ages will be computed to August 10th, 1898, and a certificate of registration is required for each entry. Quite a number of Canadian breeders have signified their intention of making exhibits, and it is to be hoped that it will be large and even more successful than that of the World's Fair.

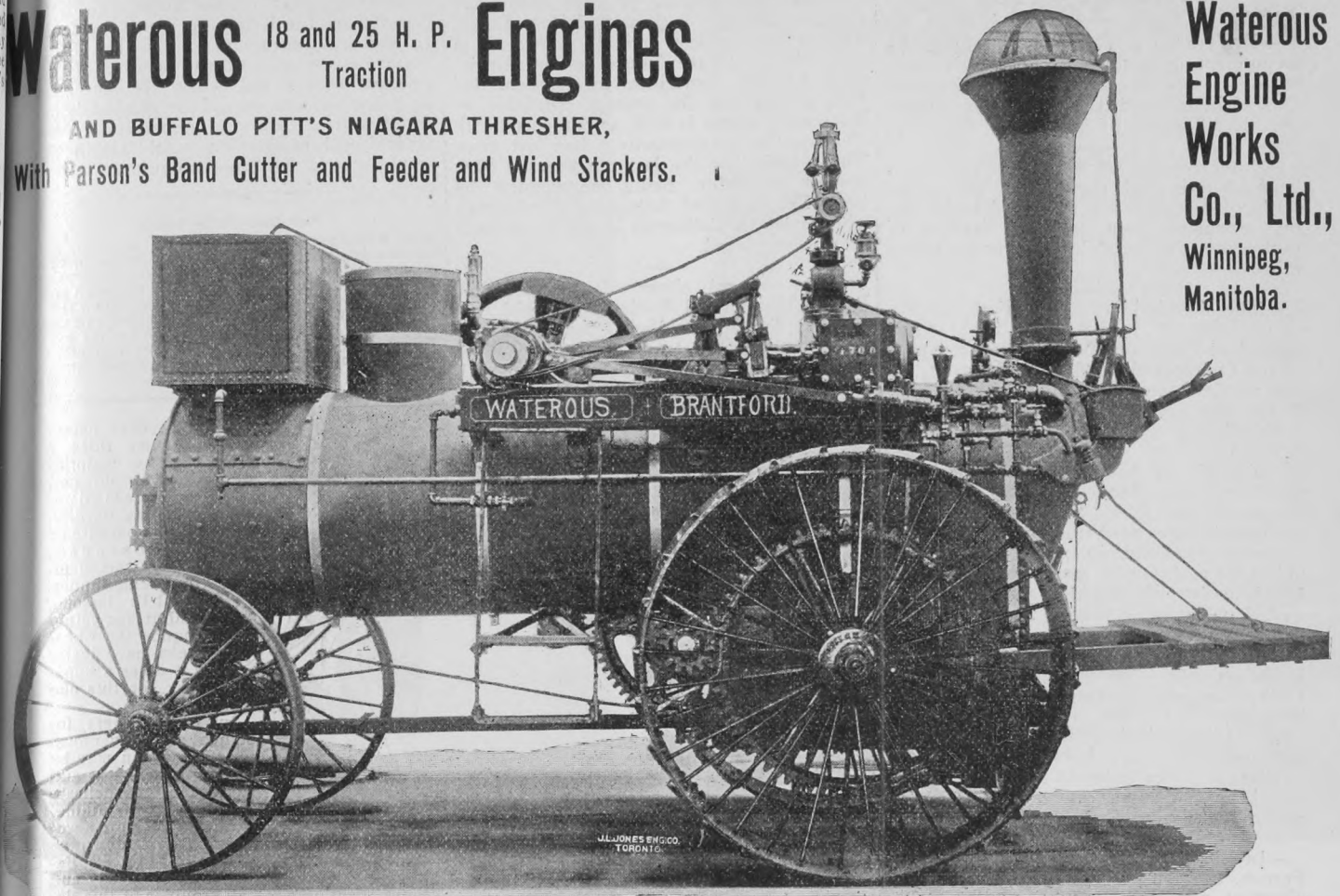


# Waterous 18 and 25 H. P. Engines

AND BUFFALO PITT'S NIAGARA THRESHER,

With Parson's Band Cutter and Feeder and Wind Stackers.

**Waterous  
Engine  
Works  
Co., Ltd.,  
Winnipeg,  
Manitoba.**



## WHEAT MARKET TOO BIG FOR HIM

Some months ago Joseph Leiter started speculating in wheat, and later set out to corner the market, but as has so often happened, it was once more demonstrated that no one man or set of men can control the market of one of our leading farm products for an indefinite time. There is no doubt that his speculation in wheat was responsible for the high price of wheat all winter and spring. An agricultural exchange has been lauding Leiter as the farmer's friend, as though he had done a great thing for the farmers. True, a number of farmers have sold a small amount of wheat for a high figure, but the great bulk of the wheat in the country was sold at a low figure. On the other hand, Leiter, by his operations, has raised the price of bread to every user the world over. The bread riots of Europe, the suffering and misery of thousands upon thousands of people everywhere have been greatly increased by his operations. Bad as they have been, they would have been very much worse had he been able to have controlled the market as he wanted. We hope no one man or set of men will ever be able to control the world's supply of wheat or any other product, for that matter. It is a very dangerous feature of our civilization, and we hope that everyone who sets out to do as Leiter did, will meet with his fate.

## FLOUR ADULTERATION.

In last month's issue The Farmer referred to the various smart devices originating in the fertile minds of unscrupulous schemers for the adulteration of flour. This particular industry has had a severe check in the Tawney Bill just passed

through Congress. Mr. Tawney is a representative of Minnesota, the great milling state of the union, and appears to have done his work pretty thoroughly. To begin with, the maker of mixed flour must take out a license costing \$12 per annum. Every package of his product must bear in plain black letters, 2 inches long, the weight of the package, the name of the ingredients, and the name and place of business of the maker. A card to the same effect must be put inside the package. On every such package (not larger in any case than 196 lbs.) an inland revenue tax of 2 cents per 100 lbs. must be paid, and the dealer who sells unstamped packages will be liable to a penalty of \$50. Adulteration by deleterious mixtures is entirely prohibited, and only corn flour will be allowed in the preparation of such mixtures. The compounds so made will be, therefore, quite wholesome, and the buyer will know exactly whether he is using pure flour (on which no special tax is paid) or, if not, what proportion of corn is in the flour he buys. The penalties exigible for infractions of the statute run as high as \$500, or a year's imprisonment.

## THE FARMER'S TENT.

The Nor'-West Farmer will again have a tent at the Winnipeg exhibition grounds, which we hope the readers of the paper will use when they wish to rest. Make our tent your headquarters. Stockmen will find writing material at their disposal when they wish to write to their friends. Orders for printing left at the tent will receive prompt attention. We want to make your acquaintance. Come and see us. We have a handy little farmer's note book, which you may have for the asking.

## THE SHOWS AT PORTAGE LA PRAIRIE AND CARBERRY.

Up to the date of going to press we have not had any prize list of either of these shows. We learn that Carberry is to offer \$3,000 as prizes, and the directors are using every effort to make the show as attractive as possible. The dates fixed are July 21, 22 and 23, and from the interest taken by all parties interested it is confidently anticipated that the fair of 1898 will be a good deal ahead of their last year's display.

Portage la Prairie takes things perhaps a little too quietly, but there is a lot of good stock in the district, and we expect that this year's showing will be quite as good as the attractive display they made last year.

—At its recent meeting, the Brandon Farmers' Institute passed the following resolution:—"That this institute cannot approve of our government spending public money for the encouragement of foreign immigration, and that our Central Institute delegates ask the Central Institute to discuss this question in all its bearings." This question is one that will, we hope, be fully threshed out at the coming Central Institute. There are a great many very sensible people of all shades in politics who believe that it would be a much wiser thing for our government to reserve this western heritage of ours for our own children and people of our own nationality in preference to filling it up with thousands annually of foreigners who have little affinity with ourselves and our institutions. Why all this haste to give away almost the last vacant area at our disposal?

## EDITORIAL NOTES.

—Dr. Torrance, V. S., of Winnipeg, has an interesting article on the horse's teeth in this issue. He has made the subject very plain and with the illustrations everyone should profit by it.

—After several years of semi-starvation from drouth and poor feed, the range cattle of Montana are now said to be dying of surfeit from excessive feeding of rank grass produced by the recent heavy rains.

—The shareholders of the Farmers' Elevator Co. at Indian Head held their annual meeting on June 16. The report of the directors showed a good surplus on the year's operations, and a dividend of 20 per cent. on the subscribed capital was declared.

—The Crystal City Courier is the latest addition to the local press of Manitoba. Its proprietor, R. H. Spedding, is an experienced newspaper man, and his new venture comes out in good clear, readable type and equally good business form. We heartily welcome his new venture and wish it all possible success.

—In our June issue mention was made in the column, "Among the Breeders," of J. M. Gardhouse having purchased a carload of stock for Mr. Heubach, of Touchwood Hills, and also that Mr. Gardhouse was judge of heavy horses at last year's exhibition. The latter is a mistake, as it was John Gardhouse, and not J. M., who was judge last year.

—In the new reciprocity treaty with France, the United States admits French wines at materially reduced duties. The reduction is so large that it calls forth a vigorous protest from the grape growers of the Pacific slopes, who assert that their business will be ruined. The French tariff on American meats will be lowered 50 per cent., and the duty on American lard will be lowered 30 per cent. This will give a great impetus to the lard trade.

—July number of The Farmer has been issued a few days earlier, so that it might be in the hands of our readers before the week of the exhibition. August issue, containing a full account of the exhibition and institute meetings, will be issued by the first of the month, so that reports will be in the hands of our readers as early as possible. Copy for advertisements and reading matter should reach the office not later than the 22nd of July to insure insertion.

—The 12th annual report of Manitoba Dairy Association has just been issued. It is a pamphlet of 40 pages and contains a lot of information that every dairy man should read. The reports of the different creameries, F. Lutley's paper on "Butter-making on the Farm," the addresses by C. C. Macdonald, A. MacKay and S. A. Bedford, and the discussions all go to make up a most valuable report. Copies can be had by addressing the secretary, Miss E. Cora Hind, Winnipeg, Man.

—The Austin tragedy brings out a lot of abuse upon the Barnardo boys. They may not be all that can be desired; there are bad boys among them, no doubt, but they are not all bad. It is not fair to condemn them all because a few turn out bad. The Canadian government looked into Dr. Barnardo's work, and out of 6,128 boys brought to this country only 52 of them have found their way to the police court. Read the interesting article about the Barnardo home at Russell, Man., in this issue.

—The first carload of 1898 wheat arrived at Chicago on June 2nd from Texas. This is the earliest arrival on record of new winter wheat. The crop circular issued by the American government for June shows that the average condition of the winter wheat is 90.8, as compared with 78.5 for the corresponding date last year. The average for the last ten years is 81.6, perfect condition being represented by 100. The reported failure of the winter wheat crop in California is not so general as was supposed.

—The annual show of the English Royal Agricultural Society was held this year at Sutton Coldfield, near Birmingham, on June 18 to 24. In live stock there were 2,323 entries as compared with 2,688 last year and 3,976 at Windsor in 1889. In the intermediate years the average of entries was about 2,000. There are besides 964 poultry entries. To accommodate this there are over 9,000 lineal feet of shedding, besides fully 6,000 feet for machinery and produce. The awards of the judges will not reach us till next issue.

—A few days ago an Indian out west went to set a bear trap. The bear did not walk into that trap, but the man who set it did, and got his limbs broken, and lay some hours in terrible agony till by chance he was seen and relieved. Exactly the same thing has happened to young Leiter, who, up to a few days ago, was looked up to as one of the brightest young men in America. He did not catch the bears, but they caught him, and the obvious moral for both Indian and Israelite is:—"When you set a trap for big game, be careful not to walk into it yourself. It is apt to hurt and may cripple you for life."

—The annual report of the Experimental Farms for 1897 has been issued, and contains, as usual, a lot of very valuable information. The data given about various field crops, treating grain for smut, early and late seeding of grain, fattening steers, and feeding swine on various kinds of feeds, are all subjects of interest to every farmer. Then, the report of the horticulturist, the chemist, the botanist, the poultry manager, the foreman of the forestry department, and the reports from the branch stations are all well worth the study of every farmer. Applications for the report should be made to Dr. Wm. Saunders, Central Experimental Farm, Ottawa, Ont.

—We have pleasure in presenting our readers with the photos of nearly all the judges of live stock and dairy products at the Industrial Exhibition this year. Only two are missing, those of Mr. Thos. Russell, Exeter, Ont., and Mr. C. C. Macdonald, the provincial dairy superintendent. Mr. Russell is judge of the beef breeds of cattle; his photograph did not reach us in time to have an engraving made. Mr. Macdonald's photo appeared in a recent issue. In this issue will also be found photos of leading speakers from outside the province at the summer meetings of the Farmers' Institutes. We are sorry we cannot present a photo of Mr. Willson, the dairy expert from Elgin, Ill.

—Under the caption "Germany is Over-reaching," the Breeder's Gazette complains of the action of the German Agricultural Bund, in its zeal for German interests, in endeavoring to shut out American pork, pork products, fruits, etc. Manufacturers join in the same zeal for the welfare of the country, and foreign goods are being shut out. The Germans have fostered educational institutions, and now foreign students are to be shut out of the engineering department of the Royal Technical School. This does not suit

Americans. Yet, on the same page of the Gazette are the following words, evidently an editorial comment: "If the United States can once attain the position of provisioner of the old world its supremacy in peace or war would be absolutely assured and a career of expansion of our agricultural production would set in that would amaze the most sanguine."

## For Over Fifty Years

MRS. WINSLOW'S SOOTHING SYRUP has been used for over fifty years by millions of mothers for their children while teething, with perfect success. It soothes the child, softens the gums, allays all pain, cures wind colic, and is the best remedy for Diarrhoea. It will relieve the poor little sufferer immediately. Sold by Druggists in every part of the world. Twenty-five cents a bottle. Be sure and ask for "Mrs. Winslow's Soothing Syrup," and take no other kind.



Now-a-days nearly every woman rides a bicycle. The majority of these who do not, have failed to compass its difficulties because of nervousness. Many women after taking innumerable lessons, and trying vainly to conquer the wheel for weeks, have finally given it up as a hopeless task for this one reason.

In nearly every instance severe nervousness in women may be traced to weakness and disease of the delicate and important organs distinctly feminine. No other class of disorders so torture a woman's nerves or break them down so quickly and effectually. Dr. Pierce's Favorite Prescription is a sure, speedy and permanent cure for all troubles of this description. It acts directly on the sensitive organs concerned, making them strong, healthy, vigorous and elastic. It allays inflammation, heals ulceration, soothes pain and tones and builds up the nerves. It stops exhausting drains. It banishes the indispositions that precede maternity and makes baby's advent easy and almost painless. It insures the little new-comer's health and an ample supply of nourishment. It transforms weak, nervous invalids into strong, healthy, nerve-steady women. Thousands have testified to its marvelous merits. An honest dealer will not offer a substitute.

"My wife was troubled with 'female weakness' for several years," writes James Caswell, Esq., of Ocheltree, Johnson Co., Kans. (P. O. Box 61). "She had bearing-down pains and pain in back. Her periods were irregular, she would have fainting spells, the best doctors did her no good. By the time my wife had taken four bottles of the 'Favorite Prescription' she was completely cured. No more pain. Her monthly periods are regular, she is stout and strong. When she commenced taking your medicines she weighed about 125 pounds—now she weighs 160 pounds."

Send 31 one-cent stamps, to cover cost of customs and mailing only, to the World's Dispensary Medical Association, Buffalo, N. Y., for a paper-covered copy of Doctor Pierce's Common Sense Medical Adviser;—Cloth binding 50 cents. A whole medical library in one 1000-page volume.

## Albion Hotel,

### PORTAGE LA PRAIRIE.

Nearest Hotel to All Stations.

Large Sample Rooms.

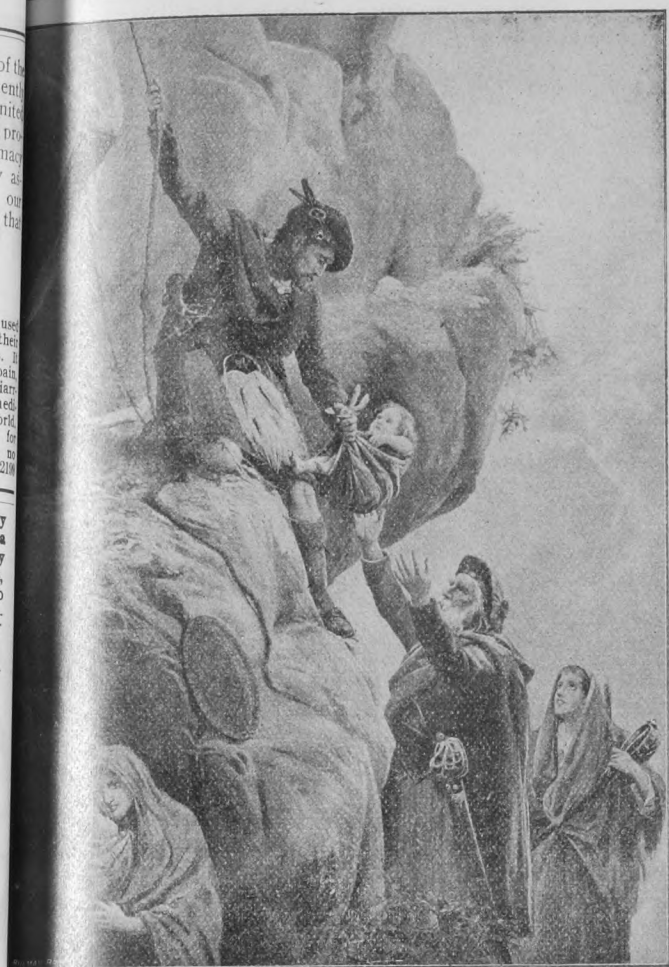
Graduated Rates.

**ANGUS McLEOD,**  
PROPRIETOR.

When writing advertisers, mention The Farmer

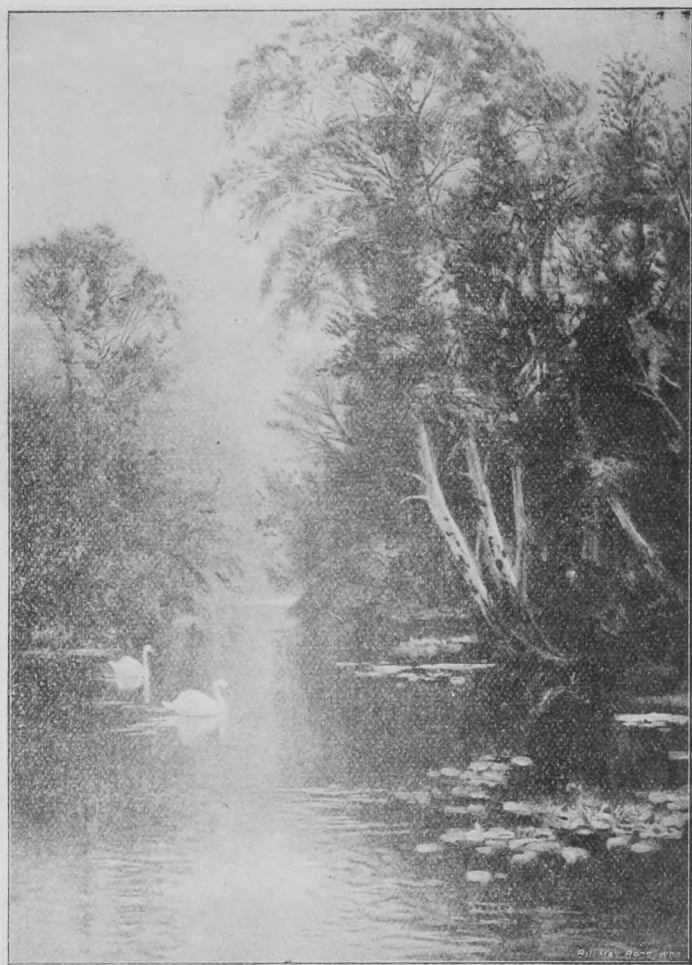


# FREE PICTURES FOR ROYAL CROWN SOAP WRAPPERS.



**WALLACE AND CARTLAND CRAGS.** Size 18 x 24.

This beautiful picture in colors for 75 Royal Crown Soap Wrappers.



**A QUIET NOOK.** Size 18 x 25.

This beautiful picture in colors for 75 Royal Crown Soap Wrappers.



**FALLS OF FOYERS** Size 18 x 25.

This beautiful picture in colors for 75 Royal Crown Soap Wrappers.



**THE HAPPY DAYS OF SPRING.** Size 18 x 25.

This beautiful picture in colors for 75 Royal Crown Soap Wrappers.

Free List of Books and Pictures on application to The Royal Crown Soap Co., Winnipeg.



**UNDER THE ANGEL'S WING.** Size 16 x 20.

This beautiful picture in colors for 50 Royal Crown Soap Wrappers.



**THE FERRY.** Size 16 x 20.

This beautiful picture in colors for 50 Royal Crown Soap Wrappers.



**ABIDE WITH ME.** Size 16 x 17.

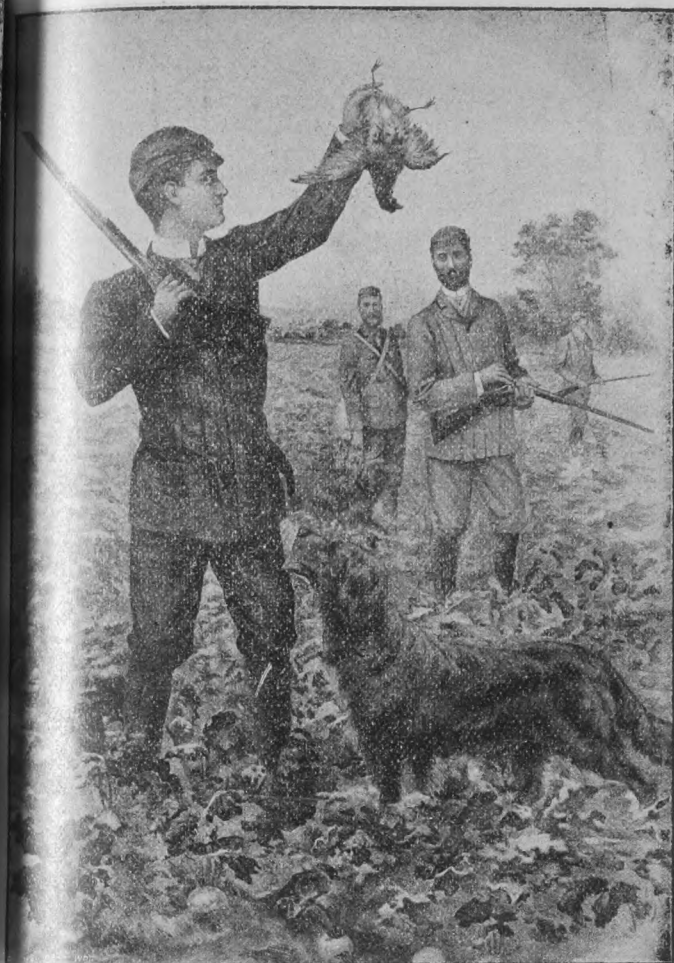
This beautiful picture in colors for 50 Royal Crown Soap Wrappers.



**SAVED.** Size 15 x 21.

This beautiful picture in colors for 50 Royal Crown Soap Wrappers.





HIS FIRST WING SHOT. Size 15 x 20.

This beautiful picture in colors for 50 Royal Crown Soap Wrappers.



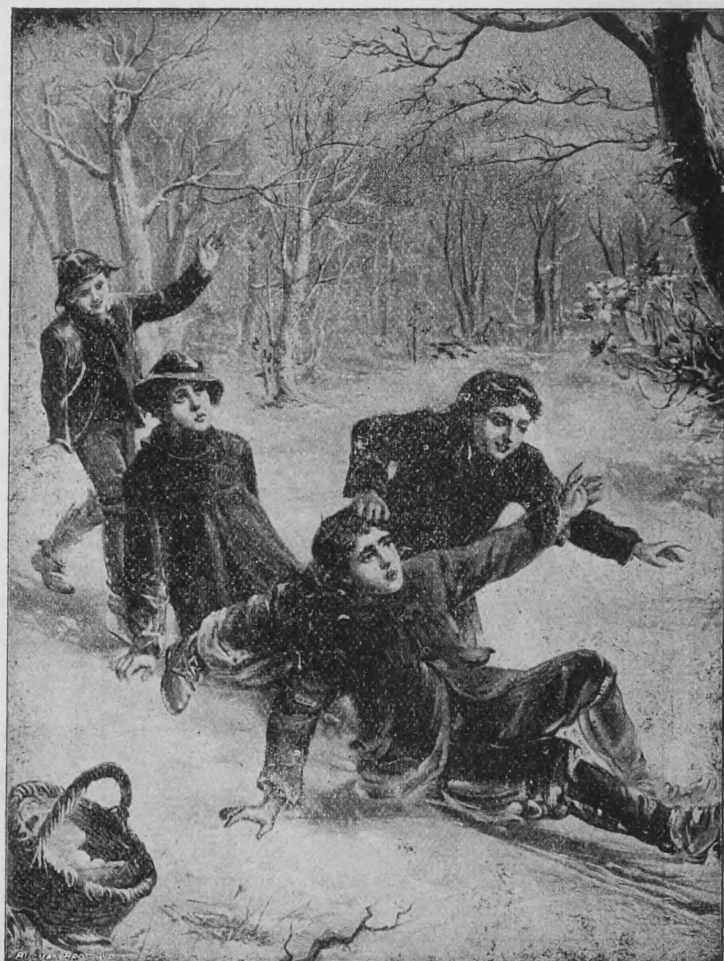
LOVE IN A BARROW. Size 15 x 21.

This beautiful picture in colors for 50 Royal Crown Soap Wrappers.



MUSN'T TOUCH. Size 16 x 20.

This beautiful picture in colors for 25 Royal Crown Soap Wrappers.



FOLLOW MY LEADER. Size 14 x 17½.

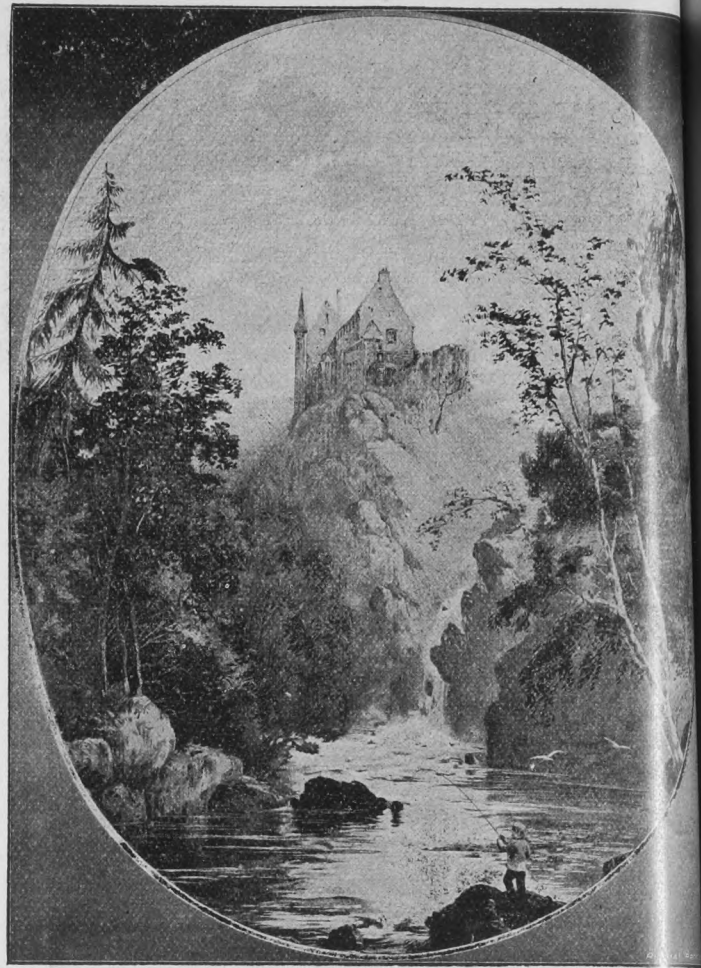
This beautiful picture in colors for 25 Royal Crown Soap Wrappers.

# Free Pictures for Royal Crown Soap Wrappers



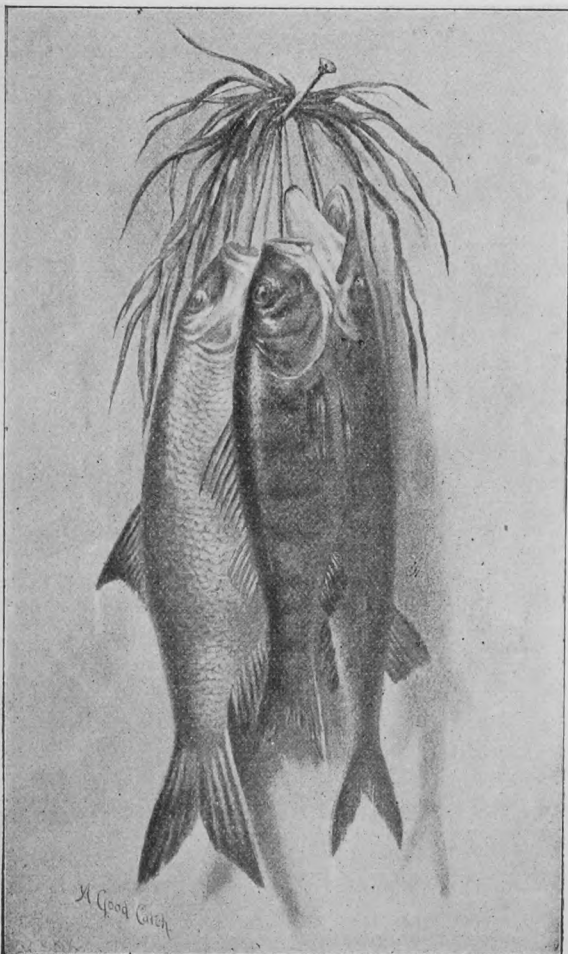
**THE ARTIST'S MODEL.** Size 14 x 17½.

This beautiful picture in colors for **25 ROYAL CROWN SOAP WRAPPERS.**



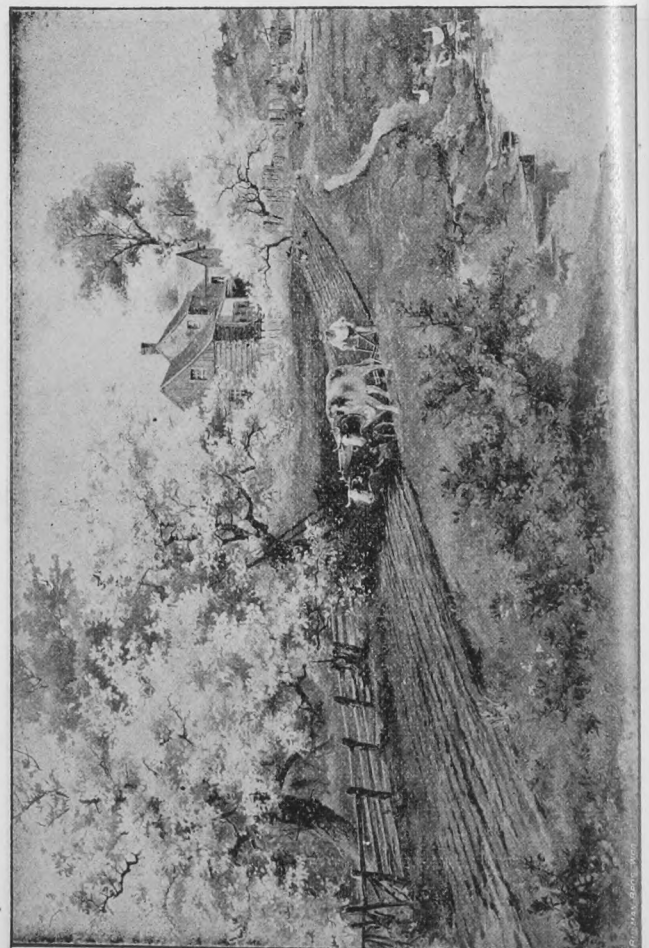
**HAWTHORNDEN** Size 14 x 18.

This beautiful picture in colors for **25 ROYAL CROWN SOAP WRAPPERS.**



**A GOOD CATCH.** Size 15 x 20.

This beautiful picture in colors for **25 ROYAL CROWN SOAP WRAPPERS.**



**A FARM SCENE.** Size 15 x 20.

This beautiful picture in colors for **25 ROYAL CROWN SOAP WRAPPERS.**



# Publishers' Desk

Read all our advertisements.

John Ryan, of the St. Boniface woollen mills, has bought the Rapid City mill and will fit it with new machinery.

Rockwood Agricultural Society has purchased 21 acres of land south of the station as a more suitable place for holding their show than their old grounds.

Persons troubled with deafness should correspond with Karl K. Albert, Box 589, Dept. G, Winnipeg, or call on him at 148 Princess street, over the Dominion bank.

The rainfall at St. John's College, Winnipeg, during the month of June was 6.38 inches. On July 1st and 2nd 1.28 inches fell, thus making during our rainy spell 7.66 inches of rain.

The Waterous Engine Works Co. Ltd., of Winnipeg, will have on exhibition at the Industrial a full line of their goods, the high quality of which is beyond dispute. Examine them and compare them with other goods and see if they are not strictly "in it."

The Stevens Manufacturing Co., of Winnipeg and London, have placed with us an "ad." of their famous "Ertel Victor Hay Press." Those who have not seen this leading press should take the opportunity of examining its superior qualities at the Winnipeg summer fair.

White Bros., of Portage la Prairie, have invented a contrivance for handling straw that can be attached to any threshing machine. Those who have to overhaul their machines should see this contrivance at either the Winnipeg or Portage la Prairie fairs, for it promises to be something good.

If you want a light running, strong, durable mower or other farm machine, see The Fairchild Co.'s exhibit of Deering farm machinery at the Winnipeg exhibition. The Deering firm have been manufacturing farm machinery for forty years, and know how to build a machine that will give satisfaction.

J. E. Smith, Brandon, importer and breeder of Clydesdale horses, Shorthorn and Hereford cattle, sends in change of copy for his advt. in The Farmer for July issue, which was received too late. His stock are in good shape, and he will be pleased to have people come and see his stock.

We would draw the attention of our readers to the free offers of Smith & Burton, Brandon, of two pounds of coffee; J. E. Acton, Winnipeg, of a quarter pound Ceylon tea; and the Royal Soap Co., Winnipeg, of 12 beautiful pictures. Read their advertisements, and make the advertiser keep to his offer. When writing, mention The Nor'-West Farmer.

The July issue of The Farmer contains a large number of new advertisements from reliable and responsible firms. We trust our readers will read these advertisements and see what these people have to say about their goods. Examine the goods at the fairs and other places and make your purchases from them. In writ-

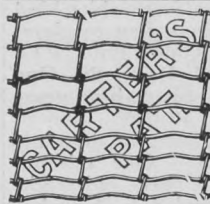
ing or calling on them, tell them that you saw their "ad." in The Farmer.

G. B. Johnston, Austin, has a field of wheat well headed out, some of which was in bloom, on July 2, which promises to be a good crop. This is the earliest wheat we have heard of this year. About seven miles north of Sidney, in the China district, Chas. E. A. Breden has 100 acres of wheat as good as has come under our notice. It is about three feet high, in the shot blade, and is free from weeds.

The Cockshutt Plow Co., Ltd., of Brantford and Winnipeg, are doing a good business in plows. Their plows captured twelve prizes at the recent plowing matches at Blyth and Oak Lake. They will have a full line on exhibition at Winnipeg, and will gladly show any intending purchaser the valuable features of their superior plows. This company are handling the carriages, buggies, sleighs, etc., of the McLaughlin Carriage Co., Oshawa, Ont. The goods of this firm are well-known and will stand the closest inspection, and your inspection is invited at the Winnipeg exhibition.

The interest taken by the people of Winnipeg and the west in the new train which has been put on by the C. P. R. between Winnipeg and Fort William in connection with their lake route to the east, proves that it is a very popular service. It leaves Winnipeg at 4:30 p. m. Mondays, Thursdays and Saturdays on arrival of the trains from Deloraine and Glenboro, passengers reaching Fort William next morning. It runs alongside the dock, and passengers are transferred to the steamer, where breakfast is waiting, and the vessel immediately takes her departure for Owen Sound. This enables all the passengers to make the trip from Southwestern Manitoba to Eastern points in three days, two-thirds of the time being spent most enjoyably on the steamer while crossing Lakes Superior and Huron. At Owen Sound a special train is in waiting to take passengers to Toronto, which is reached at 1 p. m., in time to catch all trains going east and west.

Drinks for hot weather is the subject of a very interesting advertisement of John F. Howard & Co., chemists and druggists, of Winnipeg. It will be found on page 331. This is a matter of great importance from a health standpoint in many parts of the country. In making Howard's Root Beer the water is boiled, thus killing any injurious vegetable or



## SEE IT!

CARTER'S FENCE MACHINE can be seen at hardware or implement shops in the principal towns in Manitoba and you will then know it will not pay to use barbed wire. Price \$15.00.

Fred Smith, Brandon.

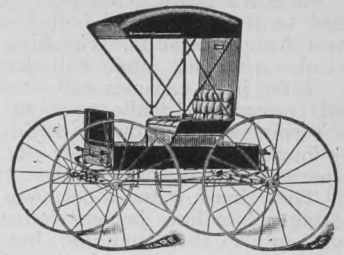
GET YOUR  
SEPARATORS  
REMODELLED.

White's  
Perfection  
Straw Deck.

See a Full Sized Working Model at Winnipeg Industrial and Portage la Prairie Exhibitions.

White Bros.

PATENTEES AND MANUFACTURERS,  
Portage la Prairie.



FOR BEST VALUE  
IN CARRIAGES

Call  
...on **A. C. McRAE,**

Corner King and James Sts.

WHOLESALE AND RETAIL.



Currie's  
PUMPS.

Have the following record:—Taken all the **FIRST PRIZES** and **DIPLOMAS** at the Winnipeg Industrial Exhibition. They are strong, fast pumping, non-freezing, and last, but not least—CHEAP.

These pumps have been in use for the past twenty years in Manitoba and Northwest Territories.

Currie's Double  
and Single Action  
Force Pumps

Will be in operation at the Exhibition.

John Currie,  
....Pump Manufacturer,  
178 Rupert Street East, WINNIPEG.

animal matter, which is acknowledged to be the cause of a large amount of illness. A 10-cent bottle of the Root Beer extract is added to five gallons of boiled water, and you have a healthy, refreshing and delightful, sparkling and non-alcoholic drink. Lime juice capsules will be found a great convenience while working at a distance from home. Howard & Co. have always found that visitors to the city take home with them a quantity of their specialties. Their hard water toilet soap and renovating cream have become indispensable, not only in the Dominion, but they have sent large quantities of both to Great Britain.

#### THE TORONTO EXHIBITION.

The Toronto exhibition, otherwise known as "Canada's Great Industrial Fair," has become one of the best, if not the best, annual fairs on this continent, and attracts visitors from all parts of the Dominion and adjoining States. It is to be held this year from the 29th of August to the 10th of Sept. Those who intend taking a trip to Ontario this year could not choose a better time or opportunity than this offers. We would like to see some of our prominent northwest stock breeders send some of their stock to the eastern fairs, and feel sure that they would not be far behind the eastern men in the winning of prizes. Copies of the prize list, entry forms and all information can be obtained from the secretary, H. J. Hill, Toronto. All entries have to be made by the 6th of August.

#### BATTLE'S THOROLD CEMENT.

An industry which has made rapid advancement among the farmers in Canada during the last year or two is "Battle's" famous Thorold Hydraulic Cement. This cement has been extensively used by engineers, contractors, stonemasons, builders, millers, and hardware merchants for a period of fifty-six years, but until within the last two years the idea that any farmer would ever require a whole carload of it would have struck anyone as extremely improbable. This, however, is an age of progress, and the Canadian farmer has given his unmistakable evidence of his ability to keep pace with the rest of the world in all matters affecting his interests, and particularly in the employment of those agents which afford economy in the management and conduct of his business. The time, labor and expense entailed in maintaining his numerous buildings in repair has led him to seek in their construction for those materials which combine the qualities of strength, durability and cheapness with those of a handsome appearance, and last, but not by any means least, absolute cleanliness. In the investigation of the merits of different building at hand he has been quick to see the advantages of the hydraulic cement over, over lumber, and everything else in fact, particularly in the construction of bank barns, stables, pig pens, etc., and for the walls and flooring of the dairy, the cellar, and all underground spaces used for farm purposes. The Thorold Hydraulic Cement is consequently being substituted for lumber wherever it can be used. It makes a magnificent floor, will last for all time, and one of its very best features is that absolute cleanliness can always be maintained with very little labor and without the soakage which is found so annoying and unhealthy for man and beast in connection with wooden floors. It is impossible to enumerate all its advantages here, but we subjoin a few quotations from testimonials to its excellence from amongst hundreds of a like character received within the past few months. Mr. E. D. Tilson, of Tilsonburg, who has used the hydraulic cement, says: "I have used nearly all of the different brands of

cement sold in Canada, both Portland and water-lime cement, having built a good many sidewalks, for which I used both English and German Portland cement and some Canadian Portland; but in water-lime cement I have used mostly the Thorold cement made by your firm and predecessors. So you will see that I have had a good deal of experience in the use of cement, having probably used more than any other single man, for his own use, in Ontario. The greater part of my cement was bought from the late John Battle. Although I have had a good many carloads from other firms, I think the Thorold cement is the best for general purposes."

The manufacturers of the Thorold cement issue a very handsome pamphlet containing full and explicit instructions as to its proper use, which will be sent free to any one on application.

#### Live Stock Impounded.

Argyle, NW 16-6-13W—Three horses—one mare, color sorrel or reddish brown, about 8 or 9 years old, branded on left shoulder with the letters I-O, also white on right hind foot; one yearling mare colt, color black, with white stripe on forehead, both hind legs white; also one yearling stallion, color bay, white on forehead, both hind legs white, little lame on left hind foot. Charlie Josephson, Bru P.O.

Ellice, Pound No. 6, Sec. 12, Tp. 18, Range 29 West—One pony mare, color black, 8 years old, two white hind feet, few white hairs on forehead, branded W on left shoulder; also one yearling mare, color bay, with dark tips. J. E. Armstrong, Balmerino P. O.

Elton, NE Sec. 21, Tp. 12, Range 19—One pony mare, color bay, little white on nigh hind foot, shod on front feet, aged. Jas Tomlinson, Rapid City.

Melita, Sec. 20-3-27—One mare, color light bay, 3 years old, white stripe on face, blind in right eye, branded B on right shoulder; one mare, color roan, 3 years old, white face and legs, branded S 2 on left shoulder; one gelding, color sorrel, 3 years old, white face and legs. Hugh Jamieson, Melita.

Montcalm, SE  $\frac{1}{4}$  16, 2, 1 East—One muley bull, color white, 1 year old. Ernest Dionne, St. Joseph P. O.

Morris—One mare, color bay, with halter on head, branded C on left shoulder, about 8 years old; accompanied by a sucking foal 6 months old; one horse, color chocolate, white hind foot, star on forehead; one mare, color red, branded with saddle marks, aged; one horse, color light bay, white stripe on face, white hind legs; one horse, yearling, star on forehead. David G. Lowe, Union Point P. O.

Russell, Sec. 20, Tp. 21, Range 28—One horse, colt, color dark brown three years old, no brand. L. L. Roberts, pound keeper.

Sifton, Section 25-9-23—One gelding, color bay, about 5 or 6 years old, right hind foot white, and branded L R on left shoulder; one gelding, color bay, about 5 or 6 years old, with white spot on left hind foot and star on forehead, branded L R on left shoulder. A. D. Chisholm, Griswold.

Section 16, Tp. 14, Range 21—One heifer, color red, 2 years old. Peter Tod, Tetonka.

Shell River, Sec. 34, Tp. 22, Range 28 W of 1st P. M.—One horse, color, white, about 14 hands high, branded on near hip; found tied to a tree on the Duck Mountains on the 9th day of May, 1898. John T. Adams, Assessor P. O.

South Cypress, Pound No. 8, on Sec. 34, Tp. 17, Range 15 W.—One pony mare color white, branded F C on right hip; also one stallion colt, 1 year old. T. G. McCombs, Stockton.

South Cypress, Pound No. 9 on Sec. 6, Tp. 7, Range 15—One mare, color light bay, branded N F on the right shoulder and B G on the left. William Scott, Poundkeeper.

St. Boniface—One pig, color white, short tail, about two months old. Lig Gagne, Poundkeeper.

St. Boniface—Two yearling heifers, color red and white, no visible marks; one yearling heifer, color brown, with a white spot on the forehead, branded H B on the right hip. Lig Gagne, Poundkeeper.

Turtle Mountain—One mare, color dark brown, white star on forehead; one horse, color dark sorrel, white stripe on face; one broncho mare, color bay, branded X on flank. H. T. Jones, Lyonshall P. O.

Lost—A white pony mare, brand P C on right hip, lame; also grey yearling colt, white face and legs. D. Shaw, Burnside.


# FARMERS

When you are in to the Exhibition at Winnipeg, don't go home without Visiting

THE

# CHEAPSIDE STORES

If you don't come, and want—

 DRY GOODS, CLOTHING, BOOTS AND SHOES, TRUNKS OR VALISES

Write to—

Rodgers Bros. & Co.,

P.O. BOX 639... CHEAPSIDE STORES.

Always the Lowest in Prices.

## PORTAGE MARBLE WORKS. RAYMER & CO.,

Dealers in— Marble and Granite Headstones.

Cemetery Work of Every Description Neatly and Promptly Executed.

P.O. Box 120. PORTAGE LA PRAIRIE, MAN.

## G. P. HOUSSE & Co.

Dealers in

◆ PINE, CEDAR, FIR, SPRUCE, OAK, MAPLE AND BASSWOOD LUMBER.

We Sell Cheap for Cash. Write for Prices.

Office and Yard: GADDY STREET,

.... PORTAGE LA PRAIRIE.





### Hay in Its Season.

Milk is a perfect variety of food, has in it all the elements necessary to the building of the body in the higher order of animals, man included. Grass is an equally perfect food for all animals to whose digestive organs it is suited. Man himself is largely dependent on the cereals for his support, and these are all varieties of grass. But just as one kind of milk is richer in nutritive value than another, so there are varieties of grass to which experience and science attribute greater value than others. And even when we have the best kinds of grass and the best soil and climate for their production we may handle them in such a way as to rob them of more than half their nutritive value. It would not be unfair to assert that the half of the hay of this country is so handled as to make it less value than good straw. It may be cut too early or too late, or, after cutting, it may be bleached by rains or roasted in the sun till much of its best quality has been wasted or destroyed.

Just at the time when the bloom is going off is the stage of growth at which grasses propagated by seed are at their best. Elaboration of material is going on fast and transformation is equally rapid. All the substances in that grass are easily soluble, and in their most readily digestible state. Proper curing does not with-

draw from the grass any of its most valuable qualities. Properly cured and stored, hay will retain that delightful perfume which distinguishes it from all other vegetable substances. All the dew should be off in the morning before cutting commences and the same rule will apply at night. If the hay cut during the day can be put into cocks the same evening, that will do much to save its volatile oils from evaporating, and in our natural hay meadows as much as possible should be in windrows to be raked up as soon as the dew is off next morning, and then put in ricks or coils, according to its condition. A good deal of the hay in our natural meadows is fairly ripe before it is cut, and by skilful handling can be taken direct from the windrow to the stack, but for dairy cows hay cut at a rather greener stage, and costing a little more to handle, will pay for the extra work in the long run. Permits to cut hay on government lands fix July 25th as the date on which it is allowed to start cutting.

No matter whether hay is left exposed to rain or sun, it will lose 10 per cent. of its value in a few days, and if the rain should happen to be protracted, with intervals of sunshine between, one-half the feed value will be gone in a fortnight. In fact, after that the animal that eats it will only do so under the pressure of hunger. Palatability and digestibility are in hay-making almost convertible terms, and any one that sees a beast nosing over a lot of bad hay, picking out the least bad parts, needs no help from an analyst to decide its worthlessness. Heat and mould are frequent consequences of bad curing and dew is perhaps more mischievous than a shower.

When writing advertisers, mention The Farmer

### Supplementary Fodders.

Unless the hay meadows make a rapid rally after the late heavy rains, there is likely to be a great shortage in the native hay crop. Timothy also is very short and will not be at all a heavy crop. The light fall of snow last winter and the unusually dry spring are responsible for this condition of affairs. Those who have a piece of Brome grass find that it is doing well, and will make a heavy cut. Many farmers are looking around now for substitutes for hay.

In the first place, we would remind our readers of the old adage that animals going into winter quarters in a fat condition are half wintered. Therefore, the aim from now out, ought to be to keep the stock in good condition. Those who have sown corn will find the value of it this fall. Dry pastures are not productive of very fat cattle, therefore where there is no corn to feed it will be in order to sow rape on a portion of the summer fallow. Though late for this, yet it is not so late but that it may be profitable to do it. Prepare a rich piece of fallow and sow the Dwarf Essex variety at the rate of about two pounds per acre, in drills, 24 to 30 inches apart. Many of the grain drills will sow the seed very satisfactorily. The rape will require to be cultivated between the rows, but this will keep the weeds down and work the fallow at the same time. Sheep are particularly fond of the rape, cattle do well on it, and so also do hogs. Cattle can pasture on the rape until it is frozen down. Failing the rape, grain might be sown to make fall pasture, so as to put the stock into winter quarters in good condition. Oats and barley can be cut green as a substitute for hay.

## Robinson & Co.'s

### DEPARTMENTAL STORES, Winnipeg.

The Largest and Best Assorted Stock in  
....City to select from, in the following:

Dry Goods, Men's Furnishings, Boy's Clothing,  
Waterproofs and Mantles, Ladies and Children's  
Boots and Shoes, and Groceries.

Special Offerings During Exhibition Week in Our Several Departments.

Be sure and call. It will prove ONE OF THE PROFITABLE  
FEATURES OF THE FAIR.

400 and 402  
MAIN STREET

ROBINSON & CO.

### The Rocky Mountain Locust.

This terrible pest is reported as having arrived in Wells, Foster and Eddy counties, North Dakota, where they have been doing considerable havoc. Their permanent breeding ground is in the Rocky Mountains and along their base, from which in myriads they issue at uncertain intervals, much like the Tartar hordes in Western Asia, "seeking whom they may devour." The last of their severe visitations was in Perham county, Minnesota, when the well-known entomologist, Prof. Luggar, was deputed by the State to deal with them. One of his devices was the hopper doser, a long box sunk in a trench and kerosene oil in the bottom of it, in which they were drowned. In that way, and by another device, 15,000 bushels of grasshoppers were collected and paid for by the State and by plowing six inches deep in the infested districts the eggs deposited were buried beyond the chance of resurrection. The insects themselves bury their eggs about an inch deep in suitable breeding grounds, but when the deposits are turned down in the fall, and the soil consolidated by snow and rain, they never get out. In the case of the present visitation the recent heavy rains in North Dakota may have the effect of checking their progress. There is a report that a few locusts have been seen in the southwest of Manitoba, but we hope this will prove inaccurate.

Recently a number of farmers from the Dakotas have gone north to see the Dauphin and Swan River districts. Some of these, on returning, state that they have been very much pleased with the country and had taken up land.

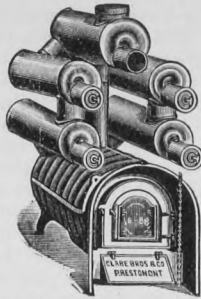
Representatives from a Mennonite settlement at Jansen, Neb., have been on a visit of inspection to the German and Mennonite settlements in the west. They report finding all the settlements visited doing well. So well pleased were they with their visit that they think that forty families will soon remove to the Territories.

The Dauphin Railway lands are not on the market yet, but many intending settlers are selecting desirable sections and entering their names for them at the land office at Dauphin. They will have the first privilege of buying when the lands are offered for sale.

A bulletin of the Illinois Experiment Station gives the cost of growing corn in that State. The data is based upon the returns of 316 corn growers, and includes every expenditure from the preparation of the soil to delivery at the elevator. The average cost is given as 19.5 cents per bushel, or \$10.59 per acre.

Geo. Wells, McGregor, Man., showed our representative a piece of land, 36x132 feet, on which he grew 80 bushels of A1 Swede turnips, averaging 6 to 8 lbs. each. He also showed him a patch of Burpee corn, which looked well, and is of opinion that it is the earliest maturing variety by two weeks over other kinds.

A progressive farmer, winner of first prize in his class at a recent plowing match, said:—"I think this thing has more in it than most of us see. If we go on doing work like this, the country could soon do without weed inspectors. One-half the increase in our weeds is due to bad plowing. If we go on covering up the weeds in this style, there will be a different state of matters before long. The average plowman leaves a fringe of unburied weeds in every furrow that go on growing and ripen more seed than we kill."



HILLBURN FURNACE.

## CLARE BROS. & Co.

**Stoves  
Furnaces  
Registers and Radiators  
Hot Water Boilers**

Our new lines of Stoves are all sellers and our new Hecla Coal Furnace gives the best of satisfaction wherever it is placed.

➔ See Our Exhibit in the Main Building.

**180 Market Street, - - WINNIPEG.**

P. O. BOX 1406.

### The Stevens Manufactur'g Co.

Of Winnipeg, Man., and London, Ont.,  
Manufacture the

"Ertel Victor Hay Press."

Acknowledged by all to be the best  
in the market.

Write for Circulars and Prices.



**Double-Acting Perpetual Hay and Straw Press**

## VISITORS

—TO THE—

## Winnipeg Industrial Exhibition

SHOULD NOT FAIL TO SEE OUR

## EXHIBIT

—OF—

**STOVES, RANGES, FURNACES, ENAMELLED WARE, ETC.**

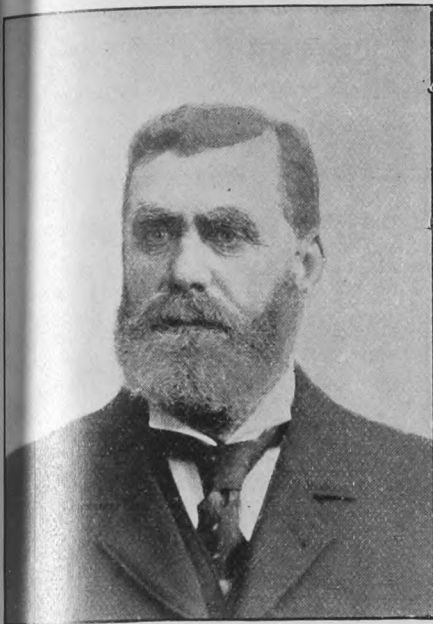
East End of Main Building.

## McCLARY M'FG CO.

LONDON TORONTO MONTREAL VANCOUVER

**192 BANNATYNE AVE. E., WINNIPEG.**





John I. Hobson, Guelph, Ont.

President of the Dominion Cattle Breeders' Association and President of the Provincial Fat Stock and Dairy Show, who was one of the speakers at the Institute meetings this summer.

## Answers to Questions.

### Mammitis.

C.P., Treherne, Man.:—1. "I have a young cow (this is her first season) for a month past the milk from one teat has been bloody, at times more so than others. I have to milk it separately. She is uneasy while I am milking it. The last two or three milkings when I commence on the teat I can feel several lumps in it, and the milk will not start until a piece of stuff in appearance like bloody tissue has passed. Sometimes two or three pieces come away. Can you tell me what is the matter and the best remedy?"

2. A young sow pigged a week late; the first pig came all right and living; the second came the wrong way, and I had to take it away from her, it was dead; the third, fourth and fifth came all right, but were dead. The next came the wrong way, and the last the same. She took over a week to have her pigs, and for a while I expected to lose her, but she has got all right and as well as ever again. She was in very good condition. I had been feeding her on soaked barley chop and milk. Can you tell me what was the reason and the remedy, should I have another like it? Would it be any use using her again?"

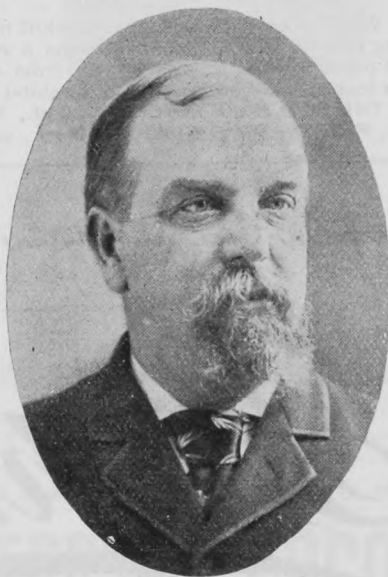
Answer—1. The cause of this condition has been an injury to that quarter of the udder, probably a blow from hoof or horn, which has ruptured some of the delicate blood-vessels and allowed the blood to escape into the milk ducts. The lumps are either clots of blood or of casein. Use gentleness in handling the teat, but persevere until the lumps are all removed. Camphor liniment may be rubbed in twice a day.

2. Probably your sow had been getting little or no exercise while pregnant, and being well fed, the muscular coat of the womb became so largely infiltrated with fat as partly to lose its power to expel the young. You might have counteracted this difficulty at the time by giving the sow a drug such as ergot of rye, which increases the muscular power of the womb; but it will be better to avoid the trouble in future by allowing a breeding sow plenty of exercise.

### Laminitis.

Enquirer, Indian Head:—"Please be so good as to give me your advice through your Veterinary Column. I slightly foundered a horse in the spring by overheating. I drenched him with aconite and raw oil, and he seemed to be quite over it. I worked him for two or three weeks, when all at once, a day or two after a heavy spell of work, which he seemed to stand all right, he became quite lame in the nigh front foot. After a few days the lameness went into the off foot. I again drenched him with aconite, and he got better, so that now, with the exception of striking the toe of the lame foot once in a while, he walks all right, but of course he trots lame. Both feet have been pared down. He has not done a tap of work since he first showed lame. He is running in a small fence all day, in which he gets a little grass. At night I put him in and feed him a handful of oats and bran with a little herbageum in. He seems to have come to a standstill now, and not to be improving at all. Is there anything I can do for him, or is he done for?"

Answer—Your horse has no doubt had a relapse and is now suffering from chron-



Isaac Usher, Thorold, Ont.

Who spoke at the Farmers' Institute Meetings this summer on "Cement and Concrete in Barn Building."

ic laminitis. This is practically a condition of soreness or tenderness in the soft tissues inside the hoof, and a horse suffering from it might be compared to a man wearing tight boots. The condition will remain permanent to a certain extent, but can be partially relieved by special shoeing and the application of a blister to the coronet. Clip the hair for an inch above the hoof and all the way round, and then rub in the following blister for ten minutes:—R. Powdered cantharides, two drachms; lard, one and a half ounces. Mix. Tie the animal's head short for 24 hours, then wash off the blister and smear lard on the part. Repeat the blistering in a week. Have the horse shod with heavy flat bar shoes, thin at the heel and thick at the toe. If possible, let the horse stand on an earthen floor when in the stable.

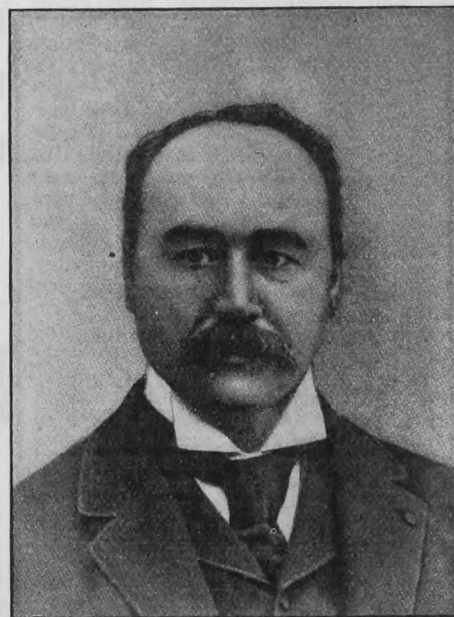
J. S. Telfer, Portage la Prairie, writes:—"In reply to 'Sandy,' of Carberry, enquiring after four-horse whiffletrees to be used on binder, you can say that if he will write me, enclosing \$1, he will get full instructions how to adjust four-horse whiffletrees which remove all side draft."

J. McKelvey, Wellington, Man., has what he claims is a sure cure for lump jaw. It is as follows:—Half pint ash wood lye, mixed with enough dry lime to make into a thick porridge. Apply for half an hour. He has tried it several times and it has proven effectual.

## The Mosquito—a Nuisance Easily Abated.

One of the most annoying features of the summer months is the mosquito plague. Every one, of course, prepares to meet these marauders the best way possible, as what can't be cured must be endured. Anything, however, that offers relief from this pest is important, and should be thoroughly tried. A recent number of the Scientific American has a short article originally taken from the Public Health Journal, which, if true, should be closely looked into. It reads as follows: "Two and one-half hours are required for a mosquito to develop from its first stage, a spec resembling cholera bacteria, to its active and venomous maturity. The insect in all its phases may be instantly killed by contact with minute quantities of permanganate of potash. It is claimed that one part of this substance in 1,500 of solution distributed in mosquito marshes will render the development of larvae impossible; that a handful of permanganate will oxidize a ten-acre swamp, kill its embryo insects and keep it free from organic matter for thirty days at a cost of 25 cents; that, with care, a whole state may be kept free of insect pests at a small cost. An efficacious method is to scatter a few crystals widely apart. A single pinch of permanganate has killed all the germs in a thousand-gallon tank." The editor adds that it is generally believed that the filling in of marshes with ashes from cities, etc., prevents the development of these pests. It is doubtless because the potash leaches from the ashes and like a solution of permanganate of potash, renders the development of insect life impossible.

In the next issue of The Farmer we will give a synopsis of the different meetings held throughout the province; lack of space prevents us from doing so this issue.



Jas. Fletcher, L.L.D.

Entomologist and Botanist, Central Experimental Farm, Ottawa.



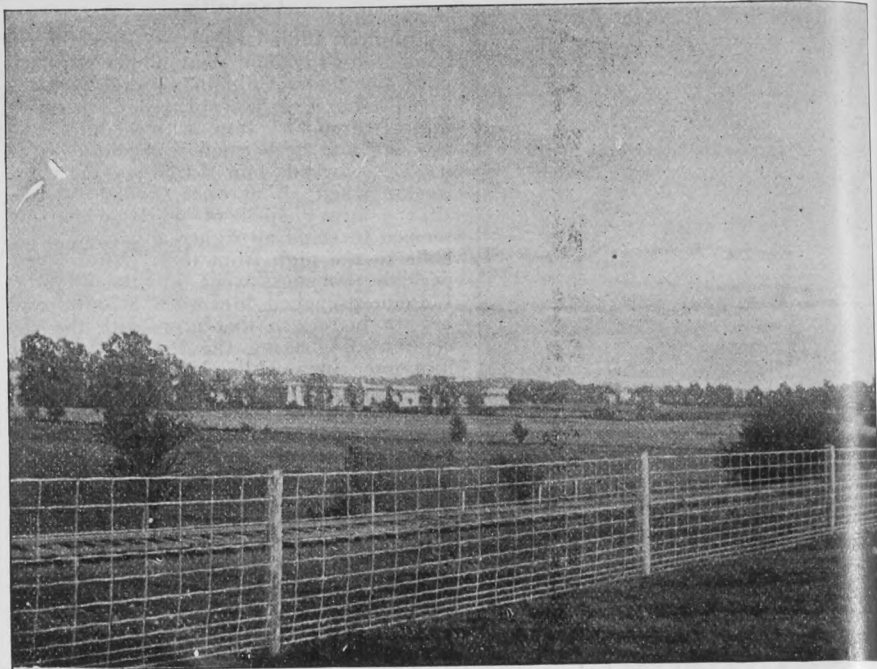
### Trees of Promise.

Every year, every day, in fact, we are getting clearer light on the things we can and ought to do, and the things it will be wiser for us to stay out of. For the last 25 years attempts, more or less skilfully directed, have been made in the direction of growing apples. Where the apple will flourish, said an intelligent western pioneer, you may count on finding men at their best. Is it some such feeling as that which prompts us to spend so much money on repeated trials in that line? If there is one thing distinctly taught by the experience of the last 20 years here it is that beyond 1,000 feet above sea level it is almost hopeless to try any sort of apple, wild or tame. Even on the level of Winnipeg it appears that success can only be reached on a sound clayey loam. Healthy wood and foliage and free fruitage for the better class of crabs, such as Hyslop and Transcendant, may reasonably be looked for by the apple-planter on such soils as Portage la Prairie and Winnipeg stand on, and presumably on the same class of soil around Dauphin city. Any success reached outside of these conditions is very delusive. Within the same limits one or two hardy apples may become good enough to please a few zealous experimentalists. If there is fruit elsewhere we would be glad to know.

Plums, wisely handled, hold out much more promise. Just how high above sea level they will thrive remains to be seen. Selected natives, especially if early ripening, will give abundant variety, and we expect fairly abundant fruit crops.

Experience in the oldest settled district goes so far. Good native sorts, budded or grafted on seedling stocks, can be multiplied in or near Winnipeg with every prospect of success. This last spring the writer sent home for some plants of the native Scotch plum, improved by the Monks of Melrose, who were very careful to propagate only by suckers from good parent trees. Seedlings from these very trees they carefully refrained from growing. But unfortunately the nurseryman, to whom the packing of these Scotch plums was entrusted, failed to do them justice, made a bad job and the experiment will have to be repeated next year. Still, we have great hopes for all the hardier sorts of plums in Manitoba. But, if the government experimentalists want the best chance of success with either apples or plums, they must begin on the lower reaches of the Red river and Assiniboine; the nearer the sea level the better.

What about planting forest trees for firewood as well as for shelter belts? Firewood is growing scarce, and if the government were to offer a bonus to every man that can show ten acres of healthy forest trees, much good would result. A century ago, or little more, the North of England and Scotland was a cheerless treeless waste, except where nature did her share to relieve the defect. But acts of parliament were passed requiring every one that used wood to plant round his homestead, and private enterprise planted for the adornment of their homes. The beauty of the parks of the wealthy is a theme of which visitors from other lands never tire, and we cannot too soon profit by the example of our forefathers, and go in for a system of tree-planting both for beauty, shelter and fuel. Some few al-



Why bother with a cheap makeshift fence when you can get a thoroughly reliable fencing like the **PAGE** at 60 or 65 cents a rod. It will hold all stock, large or small. It will protect sheep or small stock from dogs, wolves, etc. Put it up well and you have a fence for a lifetime. See our exhibit at the Winnipeg Industrial.

**THE PAGE WIRE FENCE CO., Ltd., Walkerville, Ont.,** Northwest Agent, **DAVID ROSS, P.O. Box, 553, Winnipeg, Man.,** successor to The Rathbun Co.

*When buying why not get the best?*

# Stephens'

PURE  
READY  
MIXED

# PAINTS.

For Sale by Leading Hardware Dealers.

## If Your Eyes Trouble You...

Come to us, we fit glasses correctly.

The best **FARMER'S WATCH** on earth at \$10.00. DUST PROOF, SOLID SILVER, GENUINE WALTHAM MOVEMENT. All Goods Guaranteed. Come and see us.

WHOLESALE.

**D. R. DINGWALL,**

584 MAIN STREET.



ready recognize the importance of such an effort, and are encouraged by the rapid growth of their shelter belts to make more extensive plantings. May their tribe increase.

### Western Horticultural Society.

We have just received the 120-page bulletin of this society, which has its headquarters in Winnipeg, with the following list of office bearers for 1898: President, Rev. Prof. Baird, Winnipeg; Secretary, A. F. Angus, Bank of Montreal, Winnipeg; Vice-Presidents, S. A. Bedford, Brandon; Dr. Thornton, Deloraine; E. A. Struthers, Russell; A. P. Stevenson, Nelson; Angus McKay, Indian Head; R. Alston, Winnipeg.

The bulletin contains all the most valuable papers read for the society for the last three years, and to those in search of the most reliable information on this very attractive subject, this bulletin gives the best and latest findings of the most reliable men in the province. The annual membership fee is \$1. A copy of the annual report is sent free to all paid-up subscribers. It is a library in itself, and every one who cares for this class of information should join the society, which is bound to do splendid work in the future for the advancement of horticulture.

Philip McCrae, of Rosedale, Man., has an apple tree grown on his farm from seed. The tree has now reached its seventh year and is in full bloom. This is said to be from three to five years earlier than apple trees bloom in Ontario. The tree stands out clear in the opening and has not been given shelter during the winter nor in any way particularly cared for.

The British Columbia Fruit Association in New Westminster has made an appropriation of \$300 towards making exhibitions of B. C. fruit at the Industrial at Winnipeg and at shows at other points in Manitoba and in the Territories. The fruit growers of British Columbia are endeavoring to supplant California fruit in the markets of Manitoba and the Territories. They are also giving great attention to the selection of new varieties of fruits and are bound to have soon a superior lot of fruit. In their shipments of fruit they are paying more attention to the conditions which go to make successful shipments, as cooling the fruit before packing, and packing in improved well-ventilated crates. The Dominion Express Company has reduced its rate on fruit from British Columbia to Winnipeg from \$4 to \$2.40 per cwt. and to \$2.25 per cwt. in lots of 1,000 lbs.

### Summer and Fall Fairs, 1898.

Shoal Lake—July 6 and 7.  
Winnipeg Industrial—July 11 to 16.  
Portage la Prairie—July 18, 19 and 20.  
Brandon—July 19, 20, 21 and 22.  
Manitow—July 21 and 22.  
Carberry—July 21, 22 and 23.  
Cypress River—July 27 and 28.  
Killarney—July 27, 28 and 29.  
Brokenhead—Sept. 26 and 27.  
Woodlands (Meadow Lea)—Sept. 28.  
Lorne (Somerset)—Sept. 29.  
Morden—Sept 29 and 30.  
Toronto Industrial—Aug. 29 to Sept. 10.  
Western (London, Ont.)—Sept. 8 to 17.  
Central Canada (Ottawa)—Sept. 16 to 24.  
Springfield (Dugald)—Sept. 28 and 29.  
Argyle, Woodlands, Woonona—Sept. 30.  
Elkhorn—Oct. 1st week.  
Gilbert Plains—Oct. 1.  
Mountain E. D., No. 2—(Pilot Mound)—Oct. 4.

Kildonan and St. Pauls (Kildonan)—Oct. 4 and 5.  
Dauphin—Oct. 5.  
Norfolk, No. 2 (Austin)—Oct. 5.  
Rockwood (Stonewall)—Oct. 5 and 6.  
St. Andrew's (Selkirk)—Oct. 5 and 6.  
Minnedosa—Oct. 6.  
Rapid City—Oct. 7.  
Dufferin (Carman)—Oct. 6 and 7.  
Mountain (Crystal City)—Oct. 11 & 12.  
Virden—Oct. 11 and 12.  
Beautiful Plains (Neepawa)—Oct. 11 and 12.  
Woodlands, No. 2 (St. Francois Xavier)—Oct. 11 and 12.  
Glenwood (Souris)—Oct. 12 and 13.  
Turtle Mountain (Boisevain)—Oct. 13 and 14.



WHOLESALE.

RETAIL.

## ANDREW & CO.

ENGRAVERS,  
WATCHMAKERS AND  
MANUFACTURING JEWELLERS.  
Importers of Watches, Clocks and Jewellery,  
Diamonds, Silver Plated Ware, Etc.  
Watches, Clocks and Jewellery Repaired.  
438 MAIN STREET,  
P.O. BOX 890. WINNIPEG, MAN.

## EPPS'S COCOA

ENGLISH  
BREAKFAST COCOA  
Possesses the following  
Distinctive Merits:  
**DELICACY OF FLAVOR.**  
**SUPERIORITY IN QUALITY.**  
**GRATEFUL and COMFORTING**  
**to the NERVOUS or DYSPEPTIC.**  
**NUTRITIVE QUALITIES UNRIVALLED.**  
IN QUARTER-POUND TINS ONLY.  
Prepared by JAMES EPPS & CO., Ltd., Homeopathic Chemists, London, England.  
Special Agent—C. E. COLSON, Montreal.  
1884

Pen and Pencil Stamp with Name and Address 0 25  
One Line Daters, for dating Invoices, Letters, etc 0 25  
Consecutive Numberer, from 1 to 100,000, only 0 25  
Sign and Ticket Markers, with 1-in. letters, only \$1 00  
Model Daters, with Name, Business, etc., only 2 00  
Expert Dates, with name, business & address. 2 50

Seals of all kinds made to order. All work mounted on air cushion, which ensures a perfect impression. Send for illustrated catalogue.

**WINNIPEG RUBBER STAMP CO.,**  
BOX 574, WINNIPEG.

USE THE ALL-WOOL AND ONLY GENUINE

## MICA FELTING

offered to you for roofs or siding. Impervious to water; affected neither by heat nor frost, fire-proof; easily put on. Seven years' experience have proved its staying quality. Grand testimonials from all quarters. Enamel paint for preserving tin and shingles. Guaranteed. Send for sample and price. Don't forget stamp.

1708 W. G. FONSECA, 705 Main St., Winnipeg.

# HARDWARE.

Grand Jewel Stoves and Ranges.  
McClary's Furnaces.  
Myers' American Pumps and  
Hay Tools.

The Welland  
Acetylene Gas Machine.

## BUY THE BEST.

First Prize at World's Fair, Chicago.  
USERS SAY THEY PAY FOR THEMSELVES IN SIX MONTHS.  
Awarded First Prize at every competition (but one) in Great Britain.

## ALPHA DE LAVAL

### CREAM

### SEPARATORS.

Our No. 2 Alpha de Laval is suitable for thirty cows; No. 1, twenty cows; No. "0," ten cows.

The DeLaval "Baby" Cream Separator testimonials have outgrown the possibilities of catalogue printing. The number on file is nearly 25,000 and it would take the average reader a year to read them.

WRITE FOR PRICES.

**A. L. ASHDOWN,**  
PORTAGE LA PRAIRIE.

FLOWER, FIELD AND  
VEGETABLE SEEDS  
FLORAL DESIGNS  
HAND-BOQUETS  
MARDY TREES, SHRUBS ETC  
CATALOGUES FREE  
TESTED PLANTS  
BULBS  
BIRDS  
ALWAYS ON HAND  
FINE STOCK  
OF CUT FLOWERS  
R. ALSTON  
FLORIST, NURSERYMAN  
& SEEDSMAN  
WINNIPEG, MAN.

## VETERINARY INFIRMARY

AND HORSE SHOEING FORGE.

I make a specialty of surgical operations and lameness. I also perform a painless operation for bone spavin, which leaves little or no blemish and is successful in 85 per cent. of cases treated.

**DR W. E. MARTIN, V.S.**

AND PRACTICAL HORSESHOER,

281 JAMES STREET, WINNIPEG, MAN

Graduate of Ontario Veterinary College.

## PROVINCIAL LAND SURVEYORS' ASSOCIATION.

Under authority of sections 39, 40 and 41, Cap. 121, R.S.M., the following only are entitled to practice as Provincial Land Surveyors in Manitoba:

Aldous, M.,	Winnipeg	McPhillips, R. C.,	Winnipeg
Bayne, G. A.,	"	Simpson, G. A.,	"
Bourne, Robt.,	"	Young, R. E.,	"
Chataway, C. C.,	"	Francis, J.,	Poplar Point.
Doupe, Joseph,	"	McFadden, M.,	Neepawa.
Doupe, J. L.,	"	Rombough, M. B.,	Morden.
Ducker, W. A.,	"	Bouchette, C. J.,	Selkirk W.
Harris, J. W.,	"	Vaughan, L. S.,	Selkirk W.
Lawe, Henry,	"		

By order,

J. W. HARRIS, Secretary,

P. L. S. Association.

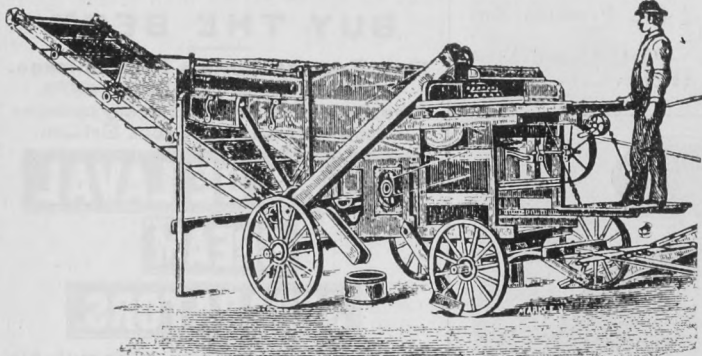
N.B.—The practice of surveying in Manitoba by any other persons is illegal, and renders them liable to prosecution.

1445F

# BRANDON MACHINE WORKS Co.

## BRASS AND IRON FOUNDERS.

Manufacturers of the— **McRobie Patent Chemical Fire Engines.** (See Exhibits.) Also—  
**White's Patent Straw Carrier Deck.** (Impossible to throw over grain with this straw carrier).



**SMOKE STACKS,  
BOILERS,**

**LAND ROLLERS,  
SAW FRAMES.**

Agricultural and Mill Machine Repairs promptly attended to in any part of Manitoba and the North-West Territories.

CORRESPONDENCE SOLICITED.

NEW AND SECOND-HAND THRESHING OUTFITS ON HAND.

ASK FOR PRICES.

## J. F. MITCHELL,

### Photographic Artist,

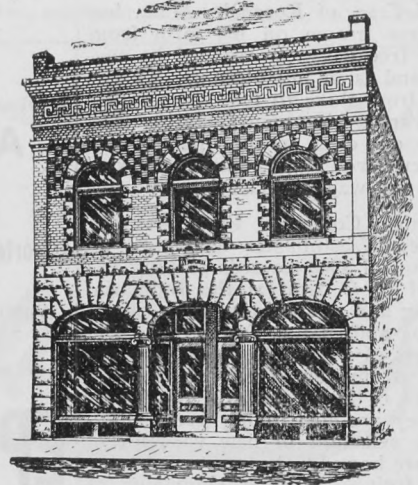
WINNIPEG,  
MAN.

211 Rupert St, Corner Main St.,  
Second Street North of City Hall.

The Largest and Best Equipped Gallery in Canada.

All Work Guaranteed of the Finest Quality.

Visitors to the City are cordially Invited to Call and See the Work.



....VISITORS  
TO WINNIPEG  
SHOULD SEE

...TWO SIGHTS  
Banfield's  
Mammoth  
Carpet Store  
AND THE  
Exhibition.

Third Largest Carpet  
Store in Canada is

## BANFIELD'S Carpet Store,

WINNIPEG.

CARRYING A LARGE STOCK  
DOING A LARGE BUSINESS  
LARGEST PURCHASE MEANS LOW PRICES

800  
PIECES OF  
CARPET

Everything to make home comfortable:  
CARPETS, OIL CLOTHS,  
ENGLISH LINOLEUMS, BLINDS,  
CURTAINS, BEDDINGS AND LINENS.

SPECIAL FOR EXHIBITION WEEK.

Fifty Pieces of the Best English Linoleum, in 4 yard widths,  
Carpet Designs, for dining rooms, etc.

## DON'T FORGET

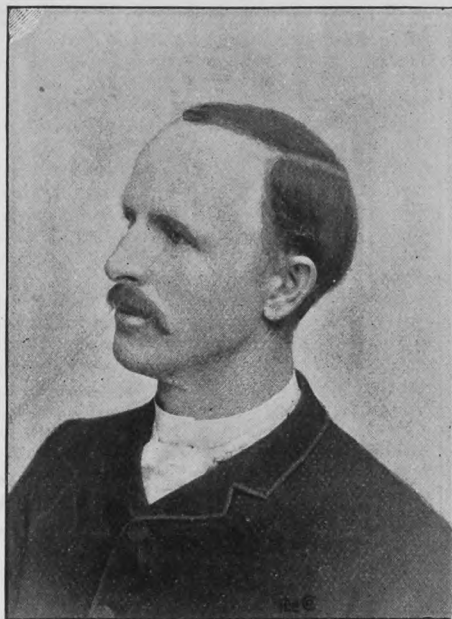
Carpets Made Free of Charge.  
Your Goods Delivered.  
Bring in the Size of Your Rooms.

1,000  
TOWELS AT  
HALF PRICE 40c for 20c.



## Western Manitoba's Big Fair at Brandon, July 19, 20, 21, 22.

One of the most important and interesting events to Manitoba and adjacent provinces is the annual exhibition of the Western Agricultural and Arts Association of Manitoba, or, as it is more popularly known, "Western Manitoba's Big Fair." This year the exhibition and fair begins on Tuesday, July 19th and closes on Friday, July 22nd. The utility of this annual exhibition, to producers and consumers, can hardly be over-estimated. An object lesson upon the vast and varied resources of the province, it is of inestimable value. The Board of Directors confidently believe that the exhibition of the present year can be made the greatest ever held in Western Manitoba. The grounds of the society, embracing 75 acres, are remarkably well adapted to the purpose of a good exhibition, and in equipment, arrangement and convenience of access have no superior in the province. The premium list has been revised with a generous hand. Larger amounts are offered for horses than in other years, and additional classes have been opened



**S. A. Bedford,**

President of the Western Agricultural and Arts Association, Brandon.

the experimental farm at any time will justify this assertion.

Mr. John A. Christie, this year's first vice-president, is one of the pioneers of Manitoba, and both in this country and when a resident of the east, has been for the greater part of his life connected with the lumber industry. He is the president of the Assiniboine Lumber Co., whose head office and saw mills are at Brandon. He is also a director of the Northwest Fire Insurance Co., president of the City of Brandon Board of Trade, and director of several well-known companies.

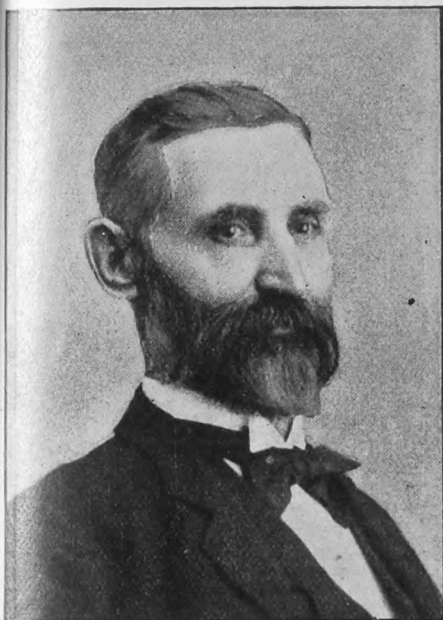
The office of second vice-president is ably filled by Mr. R. E. A. Leech, a large and successful farmer, and who has been connected with farming and cattle breeding from his boyhood. He occupies prominent positions on all associations connected with agriculture, and is well known as the secretary of the Central Farmers' Institute.

Perhaps no one man has contributed more to the success of the association than has the energetic manager, Captain

Clark. He has displayed excellent executive ability in his management, and has always been quick to turn anything to advantage to the end that the fair should in every respect fulfil the purposes for which it was instituted.

One of the great attractions to Brandon during the fair is undoubtedly the Experimental Farm, and the directors acted wisely in thus choosing the dates of the fair, if for no other reason than at this particular time of the year Nature's mantle is at its prime, and without the least exaggeration, the Experimental Farm is nothing more or less than a wonderful object lesson, and words fail to describe the interest, beauty and surprise that awaits all who visit the farm.

The inconvenience experienced last year by lack of sleeping and dining accommodation has, we understand, been entirely removed, and this year careful arrangements have been made whereby good accommodation will be ensured for all. Still, it behooves every one to write in advance and secure rooms, and if private apartments are required, to notify the manager, who will secure the same upon receiving a deposit. The first day of a fair has not generally been considered the most

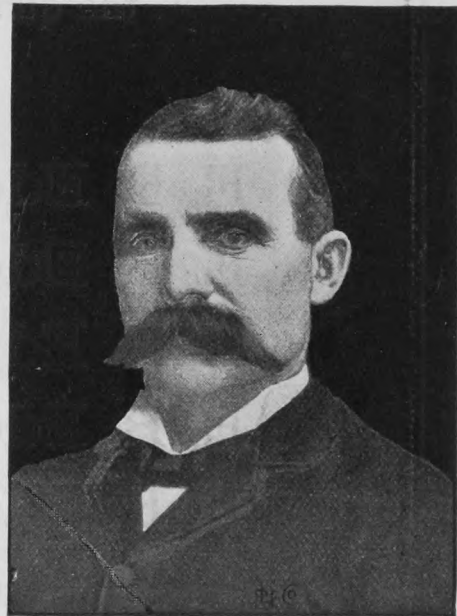


**J. A. Christie,**

First Vice-President of the Western Agricultural and Arts Association, Brandon.

for cattle, sheep, swine and poultry. The amount offered for butter has been increased. Large amounts are given for grain. Premiums for farm products are also largely increased, thus giving a new impetus to the exhibition of dairy, agricultural and horticultural products. The ladies' department will be made unusually attractive, and the main building will be filled with a wonderful profusion of miscellaneous exhibits. No little interest will be taken in the schools' exhibit this year, which we notice has been made a special feature, and no doubt entries will be received from almost every school district.

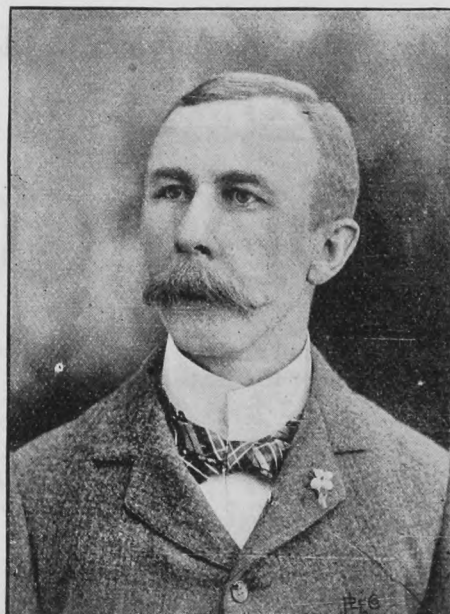
The Board of Directors is a thoroughly representative one, composed of men who have the success of the exhibition thoroughly at heart. This year's president is Mr. S. A. Bedford, Superintendent of the Dominion Government Experimental Farm, situated immediately north of the city of Brandon. Mr. Bedford is well-known throughout the Dominion, and especially so in Manitoba and the Northwest Territories, as a most capable and efficient officer and farmer, and a visit to



**R. E. A. Leech,**

Second Vice-President of the Western Agricultural and Arts Association, Brandon.

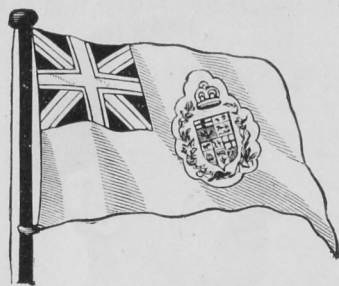
desirable one to attend, but the directors have so arranged that Tuesday, the first day of the fair, will be one of the best. Upon this day the bicycle races will be run and also all the exhibits are fresh, and this is especially the case with the horticultural, agricultural and dairy exhibits, and, moreover, the awards are made upon this day. Full particulars, with prize lists and all other information, may be had from the manager.



**Capt. F. J. Clark,**

Manager of the Western Agricultural and Arts Association, Brandon.

The Brandon Horticultural Society hold their first exhibition in the city hall, Brandon, on August 26th. Over 300 prizes are offered for plants, fruit, flowers, vegetables, garden and decorative designs, domestic industries, cage birds, and school work. Some of the prizes are open to Brandon city only, others to a radius of 20 miles from Brandon, others within 50 miles, and some are open to the province. All entries must be made at least seven days previous to the date of the show to the secretary, P. Middleton, Brandon, from whom copies of the prize list can be obtained.



# Under the British Flag

you are safe from molestation—BUT not sure of the quality of all the goods you buy.



E. B. Eddy's Matches.

E. B. Eddy's Paper.

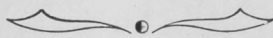
E. B. Eddy's Paper Bags.

E. B. Eddy's Indurated Fibreware.

E. B. Eddy's Pails and Tubs.

E. B. Eddy's Washboards.

Are reliable and ALWAYS THE SAME.



## The E. B. EDDY CO., Limited.

"The largest of its kind and the most unique establishment under the British Flag."

HULL, - - - CANADA.

ALL THE ABOVE LINES ARE FOR SALE BY EVERY UP-TO-DATE STOREKEEPER.





### A Successful Poultryman.

In this issue is given a view of the poultry yards of George Wood, Louise Bridge, Winnipeg. Mr. Wood has always been breeding poultry and takes great interest in them. He has always made them pay him well, too, because, like everything else, they require a certain amount of attention to ensure success. Finding that common poultry did so well with him, some seven years ago he made his first investment in pure bred stock. He purchased from New York state a trio of Single Comb White Leghorns. He has kept improving his stock; importations of fresh stock have been made from time to time, and Rose Comb White Leghorns,

leading shows in the west, and last fall he sent four birds to the Industrial at Toronto, and although they went right into the exhibition coops after such a long journey, yet they were good enough to win three prizes in strong classes. This speaks well for the quality of his birds. Expert judges have recommended his stock to other successful breeders. As a result his stock has been shipped all over the west to British Columbia, and as far as Montana in the United States. His success as an exhibitor may be gauged from his winnings at the poultry show last winter: 16 firsts, 11 2nds, 2 3rds, 4 silver cups, and a gold medal. This includes the Lieut.-Governor's challenge cup for the best breeding pen, won by his White Wyandottes. That his poultry pay him may be judged from the fact that his hens returned him a profit of \$3.24 each last year. There are many things about Mr. Wood's management and place that we would like to speak about, such as his convenient gates and doors, his incubators and brooders, and methods of management, but space will not permit. Friends may expect to see a good exhibit of his stock at the exhibition again this year.

better results than those hatched in late May. The profit was about one and a half times greater from the April hatched than from the May hatched.

The exercised hens produced twenty-six eggs per fowl more than the pens without exercise.

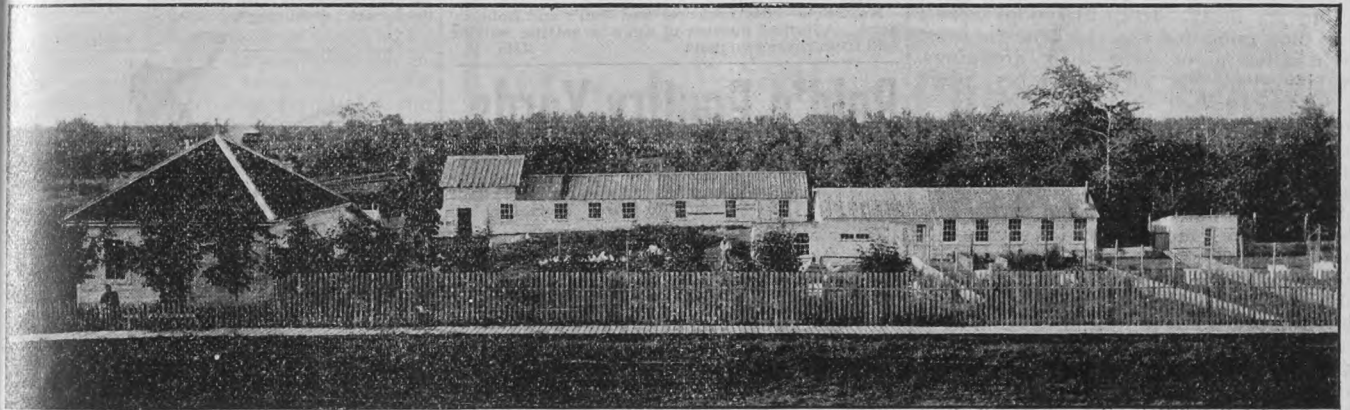
The three exercised hens produced eggs at a food cost of 5.3 cents per dozen; the pens without exercise at a food cost of 6.5 cents per dozen.

The three exercised pens averaged a profit per fowl during the year of 84 cents; the non-exercised pens, 58 cents.

Pen 1, representing egg production under the most unfavorable conditions, except as to ration fed, cleared 2½ cents per fowl during the year on the cost of food. Pen, 4, representing egg production under the most favorable conditions, cleared during the year \$1.20 per fowl. This would have been increased considerably had the eggs before the experiment been counted.

Exercise had no apparent influence on the weight of the fowl. The lack of exercise did not add to the weight of the fowl.

The non-exercised pens produced eggs



Poultry Houses and Yards of George Wood, Louise Bridge, Winnipeg.

The long building in the centre is the winter house and is seventy-five feet long by 12 feet wide inside. It is divided into pens about 12 feet square and will house something over 100 birds. It is substantially built and affords warm comfortable quarters, so necessary in the production of eggs in winter. The sides of the building are well finished; on the outside of the studs Mr. Wood put on paper, then rough lumber, paper again, then ship lap. On the inside of the studding he put on paper, then ship lap. The ceiling was finished in the same way as the inside at a height of six feet. On top of the ceiling he put a thick layer of sawdust. The walls are also filled with sawdust and being left open at the top, more sawdust can be packed in as it settles. The roof is a gable one, the space above the sawdust being used as a storehouse for exhibition coops, etc., which is a capital idea. The windows are double and the house is so warm that frost is never seen inside. The long building to the right is the incubator and brooder house. It is 50 ft. long and 10 ft. wide inside. The door opens into a little room in which there is a small furnace for boiling water, etc. To the right are five small pens each with a brooder, which at present is full of chickens. Each pen has a good window and an outside yard. To the left of the door is the incubator room, in which are three incubators of his own make. The brooder house is built much the same as the winter house, only it has on the inside, on the ceiling as well as the walls, a two inch dead air space extra. The space under the roof is used as in the winter house for storing coops. The two small buildings to the right and left of the brooder house are summer houses for chickens. Suitable yards of wire netting are connected with the pens, which give the hens a run outdoors. The floors of the buildings are all of clay.

White Wyandottes, and Black Spanish breeds have been added. His buildings have all been built by himself, and are such that any farmer could build as good if he would try. His yards are fenced with wire netting, and some of them, in among the bushes and trees, are ideal ones for summer time. Shade is very essential for chickens during the hot days in summer.

Mr. Wood is a strong believer in the incubator. He makes his own, also his brooders, and has had great success with them. At the time of our visit he had a fine hatch just coming off, and was expecting another in a short time. In his brooder house he had over 300 young chicks of all ages, all doing well. His chief feed is rolled oats, and the young chickens seem very fond of it. They also get boiled rice, crumbled bread and cooked meat chopped up fine. He aims to feed his chickens well from the start, so that they will be ready to lay early in the fall and lay all winter. Mr. Wood is very careful to select and breed from his best layers only. He has thus increased the egg-producing ability of his flock. The average of his entire flock last year was 163 eggs. As a breeder he has been most successful. His stock have won at all the

### Experiments in Egg Production.

The Utah Experiment Station has published a most useful bulletin on the production of eggs. The flock of hens at the station have been tested in various ways during the year ending November, 1897. Among the experiments reported some show very decided results. The tests include the testing of old hens and pullets for egg production; of the value of exercise; of the value of crossing pure-breds; of the relative egg-laying qualities of Brown Leghorns, Barred Plymouth Rocks, Light Brahmas and a Brahma-Leghorn cross. The annual food cost per fowl of the different breeds and the yearly production of eggs per hen were important features of the experiences. The relative value of old eggs and fresh eggs for hatching were also tested.

A summary of the bulletin is as follows: There is little profit in keeping hens 3 and 4 years old at the market prices of food and eggs in Utah. The profits in feeding young hens or pullets was six times greater than in feeding old hens 3 and 4 years old.

Leghorn pullets hatched in April gave

weighing about 3 per cent. more than the exercised pens.

The eggs produced by the old Leghorn hens weighed about 5½ per cent. more than those produced by the Leghorn pullets.

The eggs produced by the Light Brahma pullets weighed 11½ per cent. more than those produced by the Leghorn pullets.

The Barred Plymouth Rock pullets' eggs averaged about the same as those of the Leghorn pullets.

In two out of three pens exercise produced a larger consumption of food.

The exercised pens made a better use of the food than those without exercise. It required 22 per cent. less food to produce a dozen eggs with exercise than without it. The results are strongly conclusive that exercise aids digestion and assimilation of food. The chief value of exercise, therefore, seems to be in preventing a waste of food.

Exercise apparently reduced the percentage of fertility in eggs.

The percentage of fertility was highest with the early hatched pullets and lowest with the old hens though the results are not conclusive.

The fertility of eggs averaging five days

old was 300 per cent. higher than of eggs averaging twenty-two days old.

The results noted above were secured from what was considered a good ration fed alike to all pens. Practically the same ration was fed throughout the year. The conclusion, therefore, must not be accepted if a different ration is used.

The results seem to indicate an average capacity for a Leghorn pullet of 200 eggs per year, with intelligent care and feeding.

### Growing Chickens.

A good many chickens are neglected at a critical time in their life. When the mother hen leaves them to look out for themselves, the feeder should give them special attention. The success of next winter's egg production depends upon the young pullets. If they are not well-grown there will be no eggs until late into the winter; if they are well fed, so that they attain their growth early, they will begin to lay early. Early layers are the most profitable. In the first place, see that the chickens are free from lice. No amount of feed and care will make chickens grow if they are lousy. Keep the coops clean; it is not good for the chickens to roost night after night over their droppings. Provide shade for them; the best place is in the orchard or under other trees. Sunflowers make good shade and many poultrymen grow them in the chicken yards for this purpose. If there are no trees for shade, boards, sail cloth, or something else should be arranged to provide shade, as the chickens need it. See that they have plenty of grit. Supply them with a liberal amount of rolled oats, or wheat. A mixture of bran, middlings, chopped oats and cornmeal, fed just wet enough to crumble, makes a good growing feed. A few successful poultrymen mix this with buttermilk and bake it. If the greatest growth is to be attained, feed a little meat chopped up fine.

### Notes.

Nothing is relished by the fowls this time of the year like cool, fresh water to drink.

Now that the hot season is about here you ought to provide plenty of shade for the poultry.

It means a hard fight to rid your houses, etc., of lice, but it will not pay to leave them go on as they have been.

Lice, lice, lice, nothing but lice, we are sorry to say, can be found in many poultry houses at this time of the year.

Do not crowd those young pullets that you are expecting to keep for layers, but aim to keep them growing steadily.

Young chickens frequently suffer from lack of a proper supply of grit. See that they have it, and they will do better.

Lettuce is an excellent food for young geese and ducks. Usually there is more in the garden than the family uses. This can be fed with profit. It pays to raise it purposely for young water fowl.

Poultry need a liberal supply of grit, because it really constitutes an essential element in successful feeding. They require it in grinding their feed. Their run soon gets picked over of all available grit. Then they are dependent upon their owners for their supply, and unless it is supplied trouble will surely follow.

The hens like a good dust bath during the winter. It helps to keep them free from vermin and in a good healthy condition. Now is the time to lay in a supply

of nice dry earth, so that it will be ready for use next winter, when it is wanted. There is nothing better than road dust. Lay in a good supply of it.

Early feathered pullets that have been kept in a good, thrifty condition, and two-year-old hens that moult early and get their new growth of feathers make the best and most reliable winter layers. It is a good plan during the summer to select these out from the rest, and thus keep only the most profitable ones.

## Oak Grove Poultry Yards,

LOUISE BRIDGE P.O., WINNIPEG, MAN.

During the month of June prices will be cut in two.

Address—CHAS. MIDWINTER,  
Louise Bridge P.O., Winnipeg.

## BLACK MINORCAS

J. DENNER & SON, 295 Fountain St., Winnipeg. Breeders of high-class Minorcas, will this season breed from two pens.

No. 1 Pen—headed by brother to the winner of New York Show, 1897, mated to pullets imported direct from Pitts, of England, winner at the Crystal Palace.

No. 2 Pen—Pitts' cockerel and Duff's and Roberts' hens. A limited number of Eggs for setting will be sold from these two pens. 2246

## Reid's Poultry Yards.

My **BLACK MINORCAS** at the Poultry Show in February won as many prizes as all competitors combined and silver cup for best display. **GOLDEN WYANDOTTES**—1st pen, 2nd cock. Stock for sale. EGGS \$2.00 per setting of 13.

2291 THOS. REID, 293 Lizzie St., Winnipeg.

## BUFF COCHINS.

Having imported the best trio ever brought to Manitoba and mated with best previous strain here, will sell EGGS from above birds at \$2.00 per setting. Also pure-bred Brown Leghorns, Eggs \$1.50 per setting.

2304 F. D. BLAKELY,  
285 Ellen St., Winnipeg

## WINTER LAYERS.



Barred  
Plymouth  
Rocks  
AND  
Mammoth  
Light  
Brahmas.

My birds are mated by one of the best Poultry judges and are prize winners at Eastern shows EGGS, 13 for \$2.00; 26 for \$3.50.

E. R. COLLIER, P.O. Box 562, Winnipeg, Man  
Eggs at half-price after June 1st.

## MAW'S POULTRY FARM

SPECIAL PRICES FOR JUNE.

This is the best month in the season for hatching, and I have reduced my prices on eggs from my mammoth Bronze Turkeys and Toulouse Geese to \$2 per setting, Barred Plymouth Rocks \$1.50 for 15 eggs, White Leghorns, Pekin and Rouen Ducks \$1 per setting, Wyandottes, White or Silver Laced, and Pearl Guineas, \$1.50 per setting. I have a large stock of Mammoth Bronze Turkeys, headed by yearling gobbler "Mammoth," winner of 1st and Hutching's special for best gobbler in exhibition; mated with first prize hen, 24 lbs.; 1st pullet 22 lbs., and other hens selected for size and bone. Eggs from this fine flock of acclimatized birds will produce healthy stock and free from disease. My Toulouse Geese are extra large, and won silver medal at Industrial, 1896. My Rocks are pure Hero strain, selected from high standard, size, and best egg strain. My Ducks won 1st—Pekin, old; 1st old; 1st young—Rouen—at February show. Write for what you want, and I will do my best to give satisfaction. I have issued a large descriptive catalogue, illustrated with photographs of my birds. I will mail it free on receipt of address.

M. MAW, Winnipeg.

## H. A. CHADWICK,

ST. JAMES, MANITOBA.



Light Brahmas, Barred Plymouth Rocks, Black Langshans, Guinea Fowls, and Black African Bantams, Fowls for sale of each variety. My birds are too well-known as prize-winners to call forth further comment. Write for what you want. Telephone connection with Winnipeg. German Canaries for sale, good singers.

2170



## Louise Bridge Poultry Yards

Are still headquarters for the leading strains of **S. and R. C. W. Leghorns, White Wyandottes, and Black Spanish.** I have on hand about 400 head of young stock, and to make room for them I am now offering the bulk of my choice breeding stock for sale in pairs, trios, or breeding pens, at low prices, quality considered.

Young stock for sale in fall.

ADDRESS—  
GEORGE WOOD, Louise Bridge P.O.,  
Winnipeg, Man.



## Hotel Beland

Rooms en suite with bath and all modern conveniences.

Rates \$2.00, \$2.50, \$3.00 and \$4.00 per day. Is especially adapted to please the commercial trade.

Is in the centre of the wholesale and retail district. Is in possession of a perfect system of steam heating. Special rates will be made for families and large parties according to accommodation and length of time contracted for.

W. D. DOUGLAS, PROPRIETOR.  
WINNIPEG MAN





### A Day on the Portage Plains.

It was, in fact, only part of a day, but behind a team of bays of Tom Wallace's breeding, with old man Tomlin as cicerone, a man can see and hear a lot in a short day. Some years ago I was reported by the Mayor of Portage la Prairie as having said that a man could make a living on a plains farm with fewer brains than anywhere else in Canada. If I did say so, I don't want to take it back. Stating at Kenneth McKenzie's, and going east twenty miles, there can be bleeked out an oblong of 10,000 acres that has already produced, and may be depended on to go on producing with the smallest possible help, more good wheat to the acre than can be found anywhere else in Canada, I might almost say on the continent. I saw one man on my trip that had been hailed out, and could have found more, and have known a season in which uncounted acres were frozen. But they are prudent, sensible people on the plains, and don't raise a howl every time they are hurt. They say so little that very few people know they were touched. There is no fraud in this.

If there is one man among them that wants to sell out to a tenderfoot, I have never met him. What I have heard dozens of times is that men can be found any day that are willing to write a cheque for \$4,000 or \$5,000 to pay for a quarter section that the owner is not at all anxious to sell. The men who want to buy came in any time these last fifteen years, making time payments on a quarter section, and would rather invest the quiet savings of more recent years in land at their own doors than lend their spare cash at 6 or 8 per cent. Some of them do both, though it would not be impossible to find alongside of them a man who has hardly managed to hold down the quarter section he homesteaded over twenty years ago. The solid men alongside such a man are always ready to take up his holding, as they have already bought out all the speculators have to sell. I only know one unbroken half section in all this area, and it is owned by Lord Strathcona.

Starting with J. Parkinson, just outside the town limits, I find he has now 5,000 fruit bushes, mostly red and black currants, some of which the recent drouth has been very hard on, as was also the case at other gardens I saw. He has set out in the open a large break of apples, composed of Duchess of Oldenburg, a few Wealthys and crabs of good sorts. He has a shelter belt of maples north of his berry garden, just close enough to it to gather all the snow and break down fruit trees such as plums. Right in the open, besides avoiding this risk, the bloom will not come so early, and there will be less risk of frost. Mr. Parkinson is tasteful in his work, and will keep spreading out his fruit plot. His trees are from Chase Bros., Colborne, Ont. For gooseberry louse he used hellebore and ashes with a little Paris green.

Wm. Young may be taken as a specimen of a well-doing old-timer. He has raised altogether 24 crops, the last, in '97, was the poorest and below 20 bushels. He has gone other three below 25, and more than three times over 40 bushels. On the plains they don't, as a rule, talk of other products than wheat. What cattle they do have live mostly on the road-



## IN MANITOBA FOR BUSINESS.



# David Bradley Mfg. Co.

Successors to Furst & Bradley Mfg. Co., formerly of Chicago, Ill., but now located 54 miles south of Chicago, at

BRADLEY, ILL., U.S.A.

## Plow-Makers

For Over **Half a Century**

Are establishing Agencies throughout Manitoba for the sale of Implements of their manufacture. Their

## "Garden City Clipper" Plows

Have a world-wide reputation for correct shaped moldboards and uniformly hard temper, and consequently they

Draw Light and Clean in the Most Difficult Soils.

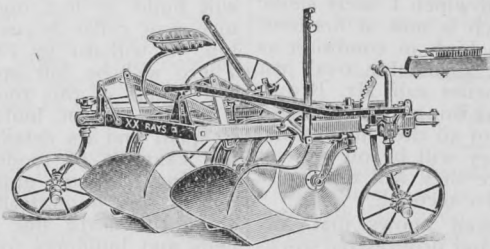
THESE BOTTOMS ARE USED ON THE

## XX Rays Gang Plow

Penetrates anything plowable, and draws 50 to 75 lbs. lighter than other plows doing the same work.

Has a patent-Stop that carries the plow bottom when at work,—thus lightening the draft.

A powerful lifting spring makes raising the plow out of



the ground so easy that a 12 years old boy can easily operate it.

Fitted with our celebrated 'Garden City Clipper' bottoms, they will scour in the most difficult soils.

It is furnished with our patent SPRING CLEVIS, which eases the strain upon team and harness whenever the plow strikes an obstruction, and which gives a more even and therefore less fretting draft to the team at all times.

### TESTIMONIAL:

"DAVID BRADLEY MFG. Co., Bradley, Ill.

SPRINGFIELD, Man., May 31st, 1898.

Gentlemen:—We, the undersigned, have to-day witnessed the working of your XX Rays Gang Plow, 14-inch, on the farm of Wm. Corbett, and we freely state that we consider it a first-class plow. It does good work, scours in the most difficult soil, and is very light draft for the work done." Your spring clevis on eveners is a fine thing.

(Signed) D. F. STEWART.  
DAVID JAMES.

ALLAN MCRAE.  
JAMES HAMILTON."

LATER.—"Allan McRae purchased above-named gang."

### THESE PLOWS

Will be exhibited at the Agricultural Fairs to be held at Winnipeg and Brandon.

For prices and terms and for particulars concerning Agencies, please address our Branch House at Minneapolis, Minn., Bradley, Clarke & Co.



## Alex. C. McRae,

Agent at Winnipeg.



sides till they can be let on the stubble or summer fallow. One old-timer, Jos. B. Hall, divides his half section into 80-acre fields for rotation purposes, one of which lies in grass a year as pasture or hay. Timothy I found, as I expected, grows freely anywhere, and at Charles Cuthbert's does quite well sown with wheat, though I am not certain that that is the regular rule.

Charles Braithwaite's old farm, bought by Mr. Hamilton, who began low down, has yielded in the last four years \$3,500 clear profit to its new owner, and he wants to spend it on more clay of the same sort. About the next half section along is held by D. McCowan, who now holds office in the town, at \$10,000, and on the west side of the same line John Wishart, whose capital paper on wheat growing recently appeared in *The Nor'-West Farmer*, has piled up about 2½ sections, mostly on the section line where he started as a renter 19 years ago. What he could not get invested at home, he has, I am told, spent on 1,000 good acres near Dauphin.

A. P. Allan is, I am told, one of the wonderfully rare sort of farmers that does no work at all and hires it out, paying cash on the nail for all he hires and buys. He keeps books with great care and can tell every dollar he has gained and spent on that farm. Result, an average for the last eight years of close on 15 per cent. return.

I must let up a little on these wheat-growers to say a little about the stock of F. W. Brown, who some ten years ago packed up his grip and left the Qu'Appelle valley to take hold on the Flee Island district, some fifteen miles north-east of Portage. He grows his own share of wheat, but likes best to talk of his Shorthorns and Berkshires. He lost a very valuable cow lately by blood poisoning. As our stock columns have shown, he has sold freely of late and has now scarcely anything to sell. His 2-year-old stock bull, Lyndhurst 3rd, was 1st in his class last year at Winnipeg, and will this year again face the music. He was bred by Groff, within a few miles of Judge, the Greenway bull of which I lately spoke in this column. Each is now at his best. Brown's bull not so high in condition as his rival, but still a formidable rival just as he is. A roan heifer calf Mr. Brown counts on as a good thing. His swine—well, I have a note of all their names and good points, but they will be on view at the Industrial, where they will talk good business on their own account.

Everybody interested knows that Mr. Brown is a pushing and progressive stockman, who won't take a back seat, but I was surprised to learn that he is about as much alive as a builder. He has just completed a barn 70 ft. x 40 ft. and 19 ft. to the eaves, sheeted with B. C. cedar, that I think very highly of in most of its details. He quite rejects the side wings, to which many of us pin our faith, but he has done much to show how a strong building can be built without interfering with the inside arrangement. The collapse of some of our best buildings has come from want of proper bracing and anchor to the ground, the wooden frame of the second story being set on the top of a stone wall. Mr. Brown builds wood from the ground, and he runs up purlin posts 12 ft. apart each, on the top of which he breaks his roof so as to have the largest available inside space with the least amount of cost. From the top of each purlin to the end of the joist a stiff scantling is securely fastened that does not interfere with the stowage, but gives great additional strength to the structure. The whole centre space is clear to the roof without any collar ties and along which the loading fork runs. Mr. Brown's claim that he combines the best

points of structural strength, room and roof I think correct. Besides granary space for 1,800 bushels of feed, he can put away in his loft 100 tons of bulk fodder. His floor, and every other new floor I see on the plains, is 2 feet above the ground level, a great advantage in snow time and equally good for ventilation in the heat of summer. Having filled in this with well-rammed earth, he uses concrete made of Queenston cement, and gravel as flooring. The body of this is gravel 6 to 1, the finish sharp sand 2 to 1, and so far it is good and likely to stay good. On this floor he put 53 barrels of cement, at \$2.30, \$115, and did it himself, five days' work of four men. Minor details of this work intending builders would do well to see.

I might specify a dozen other farmers on this plain, who, like Mr. Brown, combine the useful and ornamental in their garden, and in nothing do I see such improvement all over the province as on the layout and cleanness of its farm gardens. I must not forget the farm yards. I could point to farmers first rate in the quality of their stock and cultivation methods who have not yet shaken off the primitive free and easy style of rattle-trap old machinery all round, and tumble-down erections of poles, straw and sod of the pioneer era. Messrs. W. and J. Fulton are examples of many others I might name who don't appear to have any confusion corner, and have spacious, well-painted buildings, yards raked clean and clear, all but a two years' supply of neatly piled firewood. It is one more sign of the easy circumstances of these progressive men. I could name them by the dozen, who shake off the old free and easy style and take pride in showing me they are as much alive to taste and comfort as to money-making. Charles Cuthbert's grove, with its choice shelter, and his pet ponies for the "bairns," and the good lot of cattle and horses in the yard of Brown and Carruth, a short way further west, I must skip to deal more in detail with the big new building of John Ferris, who farms 1½ sections and builds in proportion. On stone foundations, 72x66 ft., he will build 38 feet high to peak, with a nice root cellar below and wind mill on top. It will use up 70,000 feet of lumber. There will be loft space even over the side wings of this roomy building. This with his present buildings will be from its plan and its details of fitting a leading example of modern Manitoba farm building. Let me note especially the layout of this homestead. The shelter belt along the north side of his present gardens and buildings forms now the south side of a yard several acres in extent, in which the new barn is set. Buying three years ago the quarter to the north, he at once planted a grove along the north and west side of the space he intended for the new farm yard and could enclose in the same way the east side if he sees fit. Inside this wide space there will be no snow piles, and he can use for garden all he wants and have plenty to spare.

Frank, James and John Brydon are all men to whom the eulogist of the plains can point with pride as men and farmers. Frank's buildings have now been in use some years, and have many points in detail that are not surpassed by more recent erections. He can go round his whole place without ever stepping out of doors, and this, with the arrangement of buildings and shelter, makes his place very commodious and homelike. He is also what several more here and elsewhere always are—forehanded with all his work and some years' cordwood neatly piled in a clean yard. I find my old friend, Kenneth McKenzie, has an odd quarter on my way along, all in wheat that no younger man can beat.

It gets near train time, but I have still

## WINDMILLS.



### The Canadian Steel Airmotor

For the FARM is UNRIVALLED. Adopted by C. P. Railway and Imperial Government. Galvanized or painted. POWER, STRENGTH and DURABILITY guaranteed.

Full line of Pumps, Tauks, Grinders, Etc.

Ontario Wind Engine and Pump Co., Limited,  
Liberty St., Toronto.

time to call on Thos. Wallace and admire his colts, and Thos. Sissons, not at home, having gone to town on business. He, like other good men I need not here name, crosses his wheat, seeding a bushel each way, and they all think it worth the extra trouble. There is more seed to the acre put on these plains than I find sown anywhere else, but experience vindicates the practice.

I wish that, instead of timothy, more of them would try Brome grass, but my friends on the plain do not jump at novelties.

I saw one or two rather bad examples of stink weeds, but hand-pulling was going on, too, and considering their position and the age of the settlement, weeds are wonderfully well kept under. I did not see 300 acres of poor crop on all the road I travelled, and as things go now can confidently anticipate a satisfactory crop of every variety of grain.

### The Experimental Farm.

Next morning I spent some time on the Experimental Farm, where, as usual, every crop seems to be fortunate. Weeds make a smaller show on the summer fallow plots than I expected, and perhaps the best crop showing on the whole place is the hollow near the house that was drained some time ago. Indian corn was beautiful and evenly planted. Mr. Bedford is trying very shallow plowing of summer fallow early in the season, with a deeper furrow later on to be left untouched till the seed is put in next spring as a probable means of averting blowing by spring winds after the seed is put in. This plan others are working on more or less all the time, but for the success of any such methods much more is due to the texture of the soil itself than to the skill of the man above it. There is less of novelty to me on the farm than would naturally be to those who see it for the first time, but I have the greater pleasure in seeing the contrast between the furnished homelike look of the whole place, and what I saw ten years ago. There are men not backed by government funds, who are doing just the same kind of thing on their private properties, and Mr. Bedford is helping them by his counsel and example, as well as by the specimens he is authorized to give away. Let me specify the big, strong maple hedges, good enough to turn stock, if need be, and the beautiful little ginnala maple hedge that in many a farmer's garden may be used as a dividing line between garden plots. Ask for it, if you do not see it. I think it would be more for Mr. Bedford's comfort if he were out of apple growing. I am of opinion that he will have poor luck with them continually. Five hundred feet lower down, in the Red River valley or per-



haps at Dauphin, fine crabs can be grown, and even a few apples.

### North of Brandon.

Just when I had got over the Experimental Farm, Henry Nichol came along and dotted me round his district for a few hours. On the Sandison farm Mr. Devine has now a lot of capital buildings and good pumping arrangement, but there are more weeds to battle with than on many places twice the age. Sandison often sold off his clean wheat and bought new spring anything that would fill the seed. Result to-day, weeds in excess and land run down. On another farm I saw a bad case of hare's ear mustard. Nobody can tell how it got there, but it is a serious affair now. Everyone round Brandon knows Mr. Nichol as a sure and successful breeder of registered Clydes, and his mares, to the service of old Charley, "Charming Charley," have left as fine a lot of stock as I have ever seen. These colts are not so big to start with, but they go on growing, and never fail of a place in the prize ring. His drivers are also up to the mark. His cows are dehorned, otherwise they make ugly company for horse flesh.

He has a shelter belt (I spoke of it once before) well worth noting. First, a well-planned garden, round that a belt of maples, then about 30 feet of vacant ground, and outside that another good wide strip. I expect snow to injure this to some extent, but the interspace fills up deep with snow that never gets through to the garden, and when it melts leaves the space well soaked and fit to raise any early crop in the driest spring. Besides this double belt on the north and west, Mr. Nichol has got permission to plant on the side of the road allowance farthest from his buildings. They are rather near the road, but this arrangement will supply all needed shelter. This is a high and exposed position, and from Mr. Nichol's success by his method I am sure many others could do even as well as he has. In the way of implements, I note a low-wheeled wagon like a town dray, that he finds more useful than the ordinary wagon for many purposes. On another low-wheeled dray is a moveable chopping mill of great value on such a farm. A weeder he uses I think much more promising than the Breed weeder, and also moderate in price, \$12 to \$17 according to size. The day after it has been used the grain is a little ragged, but that soon goes off, and the land is very clean.

### At Oak Lake.

At the close of the Oak Lake plowing, elsewhere reported, I paid a long promised visit to the north side of the Assiniboine, piloted by Mr. R. K. Smith, whose farm, two miles back from the river, is a fairly representative one. The roads across the river and down its steep banks have recently been put in excellent condition by the aid of the government engineers and a partial grant of public money. A mile wide of the whole valley is so much broken and the soil generally so poor as to be of little account, but on the higher level, now pretty much cleared of brush, settlement has by sure degrees covered the whole country, leaving hardly a quarter section unoccupied.

In spite of pinched rainfall, most of the crops look very well indeed, and the owners are about all fairly prosperous. They hail all the way from the Orkney Islands to Missouri, and the area of cultivation, as well as the building done or projected, tells its tale of the energy and capacity

of the whole lot. Convenient churches and schools are dotted down where wanted, and from the top of the ridge that runs through the centre of the district from the river many miles north, the view is both varied and picturesque. Mr. Smith is well-known as a breeder of very choice grade Shorthorns that take a high place in local competitions. Selected females, pure bred bulls, and liberal feeding at times and ways that they will do most good are his points for getting this result. He has fed pigs freely and profitably in the same way, Yorkshire type of sows and a Berkshire boar being his ideal blend. Nearly his whole land has been gradually cleared of the scrub that covered it, and now bears profitable crops of wheat. He sows freely of oats and barley for general feed purposes, and a few roots and corn, of which he would like to raise more. He sows both barley and wheat late, as pasture for cattle and pigs. It makes choice fall feed and he thinks pays him well. He is also trying Brome and native rye grass. His eight-year-old shelter belt of maples is now 12 feet high. He has also a large recent planting of Russian poplar. The government boring outfit is now boring for water, which should, I think, be easily got, and new stabling will in a short time replace the lowly pioneer buildings, cheap but comfortable, that have for sixteen years been gradually growing to meet his increasing requirements. This hurried outline may give some idea of the growing progress and prosperity of the settlement of which Mr. Smith was a pioneer, and is to-day a worthy example. His near relations hold a good deal of land around.

Mr. McCallum, from the Ottawa lumber district, was another pioneer of 1882. He has a carefully cultivated farm and a large and substantial farm house of solid brick. A big roomy barn, also of first-rate construction and detached stone built piggery, with poultry house above, all inside a fine natural grove, complete, along with older buildings, a very pleasant and commodious homestead. A special feature of this big barn is the number of doors into the hay loft, the want of which in sufficient number I think a great defect in some of our new barns. They cost a little extra, but are well worth the money. Mr. McCallum proposes to floor with concrete.

The Goodwin family make up a group, holding three sections that are all pushing and capital workers, as is evidenced by the prizes they raked in at the local plowing match. The Smiths are another capable family here.

Donald McBeth is well-known all over for the Clydesdale stock and well-bred Shorthorns he handles with judgment and skill, but as he does not care to figure in show rings his name is less known to the newspapers than his merits deserve.

Wm. Fawkes, with about a section of good land, and good stock, is English—not of the dude variety, but an all-round careful and capable man, who, by his steady progress in the dozen years I have known him, has proven what intelligent industry can do for a working man of the right stamp.

Owing to a misunderstanding, I failed to get out with the Shorthorn men, Messrs. Helliwell, Lang and Speers, but spent a few pleasant hours with Donald McFarlane, looking over his sappy Polled Angus cows and fruitful garden. His currants and gooseberries surpass in profit all I have ever seen in the country, and he has even Scotch gooseberries. Scotch and Norway spruce, Russian poplar and willows, alfalfa. Brome and native rye grass he also grows with success.

The McIvor ranche, south of Routledge station, I made a few hours' stay on. It is the first place I have ever seen at which

## THE MANUFACTURERS' LIFE INSURANCE COMPANY.

HEAD OFFICE: TORONTO.

GEO. GOODERHAM,  
President.

J. F. JUNKIN,  
Gen'l Manager.

A strong and popular Home Company. Issues Policies on **ALL APPROVED PLANS**. Policies free from all restrictions. **CASH SURRENDER** and **PAID-UP VALUES** after three years.

If you are thinking of insuring, see our Local Agent or write for full particulars to Manitoba Branch Office, Room 8, Grundy Block, Winnipeg.

### GUARANTEE AND ACCIDENT INSURANCE.

R. G. McDONALD,  
Cashier.

E. McDONALD,  
Manager.

P. O. BOX 560

WINNIPEG - MANITOBA.

good horses and good cattle could be bred and fed among sandhills. A foal has been dropped in March and lain out for hours, and both horses and cattle have run out all winter. Pony mares have had large, well-built colts and registered Shorthorns made their own shift in April. Water and natural shelter is good and abundant, and perhaps there is more clay underneath the herbage than the surface indicates. Messrs. McIvor lay great stress on a good sire and never use any other but a pure bred stallion. The well-known Sir Victor, by Royal Don, 1st prize winner at Winnipeg in the two-year-old class in 1896, is guarantee for the quality for the cattle raised. He may not appear at Winnipeg, but has few equals as a bull for a progressive farmer.

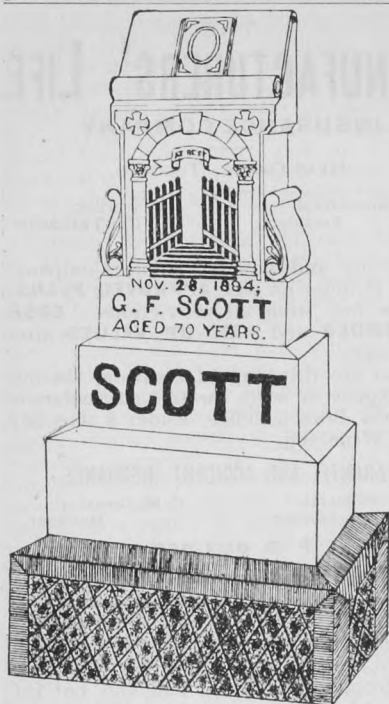
Crops from Brandon west have suffered severely from drouth, but the grass is wonderfully good. Cold in spring made clay land crops do much worse than those on sandier soils, but now they look rather spindly on light land, and must make a very poor yield.

R. W. M.

### The Barnardo Farm at Russell.

Prompted by the utter homelessness of an unfortunate street arab named Jimmy Jervis, Dr. Barnardo, then a young medical student, was led, about 32 years ago, to make an investigation into the lives of the many juvenile destitutes of East London, and on his own responsibility to open a very small house in Stepney Causeway as a home for these unfortunates. He found that there were within the metropolis large numbers of children of very tender years who had from various causes been thrown upon the world without friends and whose habitation—or lack of habitation—may be most aptly described by Jimmy's laconic, "Don't live nowhere." He little dreamed at that time that his work would be attended by the phenomenal growth which has made the name of Barnardo a household word, and that in these few years an organization of such magnitude would be the outcome, nor yet that in that time the lives of over thirty thousand of these proteges would be placed in his hands.

Out of eighty-five branches of the work at the present day, the one at Russell, Man., holds the unique place of being the only farm. Such has been the number who have passed through their training here and have been transplanted into good honest positions on the farms of Manitoba, that this place has become one of interest to very many of our people.



# MANITOBA GRANITE.

SOMERVILLE & CO.,

OF BRANDON, MANITOBA,

The Largest and Best Equipped Marble Works in the Dominion,

Are now manufacturing at their own yards, and polishing at their own mills in Brandon, the NATIVE GRANITE OF MANITOBA. It is a beautiful dark red in color, very fine in texture, and takes the highest possible polish.

## A Word to Those Who Want a Monument or a Memorial Stone :

Do not order until you have seen samples of this beautiful granite. It is the purest, handsomest and most durable that is on the market. It is equal in finish and is finer in the grain than the best Scotch or New Brunswick granite, and fifty per cent. cheaper, as we are saving both duty and freight by using home material, and are paying in wages to employees what formerly went out of the country for stock. We are the only producers of this stone.

All orders entrusted to us will be attended to promptly, and finished second to none in the Dominion. Our travellers are now showing designs and samples—wait for them.

We also make CURLING STONES of this granite, which are considered by Mr. F. Knight, and others of Manitoba's best curlers who have tried them, to be equal to the best Scotch stones.

**TRAVELLERS:**  
W. C. Stewart.  
W. Somerville.  
D. McIntyre.  
M. Cook.

The writer, while in Russell a few days ago, took a run out to see the place and take a few notes as to how everything was going. The farm is situated about four miles west of the town, and in the heart of a very good section of country. The large dark red buildings may be seen at quite a distance. The amount of land in the farm approximates 9,000 acres, and the working of this furnishes employment and training for the boys during their first year in the province. Mixed farming is here, as almost everywhere else, found to be the most profitable, and so the management go in for a little of almost everything. This year there are 500 acres under crop. The amount of stock generally kept is about 170 to 200 head of cattle, 80 to 120 pigs and 300 sheep. The farm is also provided with a dairy, and 40 cows are kept. Formerly some business was done with the farmers of the district along this line, but as another creamery has this year been opened in Russell, the collecting from outsiders has been almost entirely cancelled. While the expenses in connection with the farm are doubtless high, the earnings must be large also. At the time of visiting the wheat within sight was about the best in the community. The grounds and everything else are very nicely arranged, but, on the other hand, there does not seem to be anything so fantastic as to have got past the stage of usefulness. The branch here is under the very able management of Mr. E. A. Struthers, and he may be depended upon to keep everything running smoothly.

There is accommodation for 80 boys: about 45 boys were on the farm when I visited it, but another consignment is expected in July. Nobody but those expecting to be farmers are brought to Russell, because, as the manager very aptly puts it, the need in Manitoba to-day is for farmers. No boys under 17 years of age are brought to the farm, the distribution

of the younger ones being made from Winnipeg. The general rule is for each one to spend a year on the farm before he goes out to work his way among the farmers. The demand for the help thus provided is such that there are two calls for boys for each one filled, and care is always exercised, as far as possible, to get one into the hands of a responsible party. In fact, it is a case of "none others need apply."

In a few cases, perhaps, the lives and characters of these fostered children may never have entirely eliminated from them the taint of their early uncongenial surroundings, but the prejudice of some few biased individuals, to the contrary notwithstanding, the general history of the Barnardo boys is a creditable one. Some years ago certain charges led to an investigation by the Canadian Government into the history and conduct of these immigrants. Speaking of this, the Review of Reviews of July, 1896, says:—"These investigations into the life history of 6,128 juvenile immigrants simply confounded the assailants of the Doctor. It was proved that of his 6,128 immigrants, in a period extending over 27 years, only 52 had ever been convicted of even the smallest crime, a percentage probably less than that of the members of the House of Commons in a similar period."

G. B.

### By the Way.

The other day I heard a farmer complaining very loudly because his brood sow lay upon her young pigs and killed them. His scheme was to "fatten the brute and kill her. Doubtless that is a very effectual cure, but if you have a thoroughbred or other particularly valuable breeding sow, it may alter the aspect slightly, and some less tragical course may

be more desirable. I think the best thing I have ever seen was a very simple plan employed on my father's farm years ago. You can't prevent the sow from lying down; all you can do is to provide a means of escape for the youngsters. Now, a sow in a pen almost always makes her bed in a corner or alongside one of the walls, and generally the young ones are killed by being caught between her body and the wall. When we had a sow of this kind we would give her only a limited quantity of bedding, and that of chaff or cut straw. Then nail strips to the wall and fasten horizontal poles to these about a foot from the floor, and, say, eight or ten inches from the wall. This keeps the sow from lying against the wall and provides the young pigs with a means of escape. Generally, then, they will get away. Have others used anything of this kind?

\* \* \*

Everywhere one goes in Manitoba he finds a great many farmers using the old oaken bucket, many feeling that they have not raised quite enough wheat yet to afford a pump. Probably another reason, though, why a number of them do not go in for one is that many of the pumps made here are not very much good and are likely to split to pieces anyway. I came across a number of pumps around Russell made by a dealer there, in which the heads were made from black poplar, with the bark left on. They were nothing extra for looks, of course, but the farmers who are using them claim they are a dollar or two cheaper than the turned variety and that they will last a great deal better.

G. B.

A. W. Ivey, Griswold:—"As to your paper, I am always on the lookout for my number, and think it's the best farmer's paper in print for such a very small price."



## The Ontario Agricultural College.

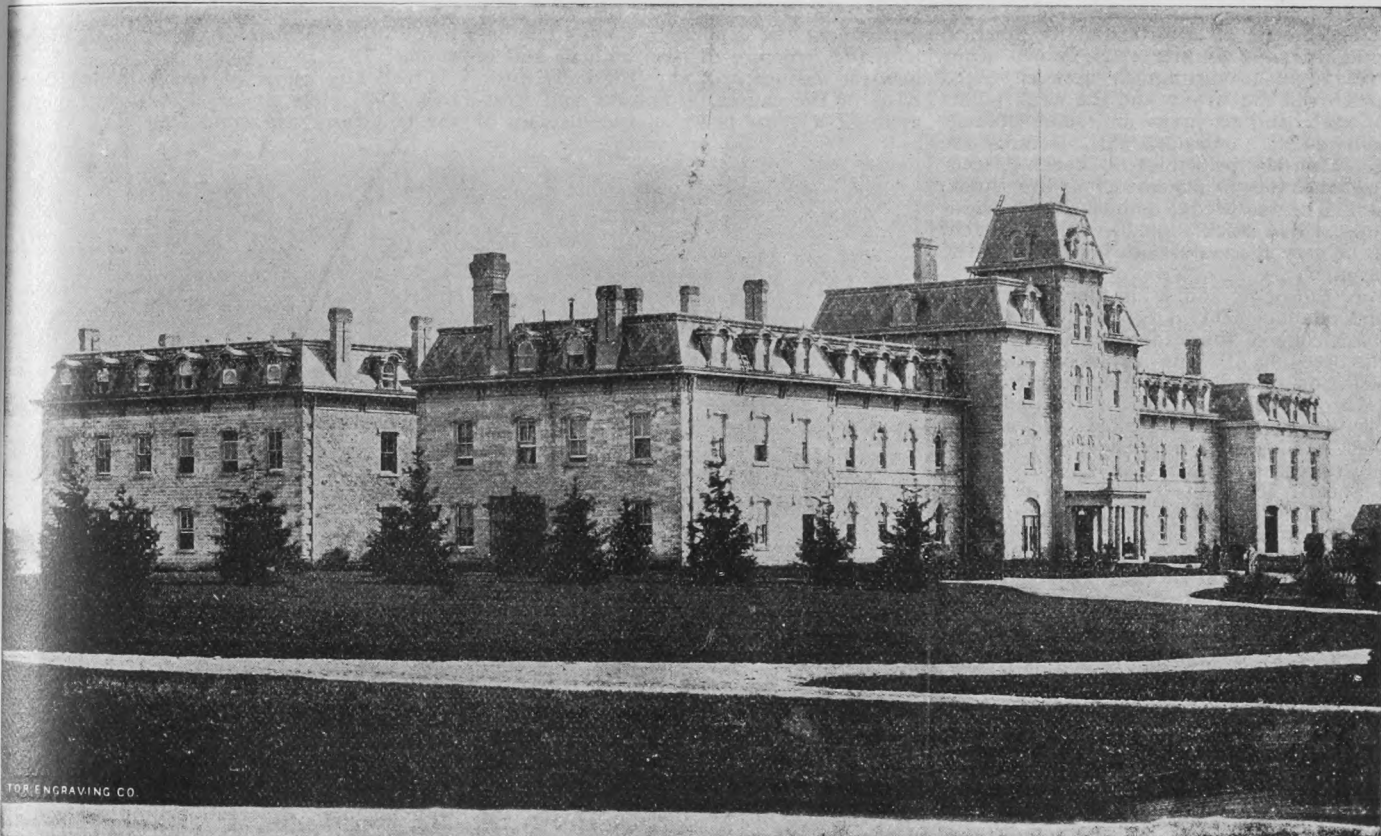
At the recent commencement exercises of the University of Toronto about two hundred young men graduated in medicine and law, while only thirteen graduated in agriculture. This statement tells its own story. These two hundred young men, full of hope and ambition for the future, intend entering professions already over-crowded to make their mark in life. It is too bad that the tendency of the age seems to be such as to cause young men to drift to the over-crowded professions, where there is plenty of room at the top, of course, but oh, so little room away down on the ladder of success. It would have been much better for many of these two hundred young men had they taken a course at the Ontario Agricultural College and gone back to the farm. What is wanted on the farm to-day, more than anything else, is men of education. We must do away with the idea that only an

in the way it is hoped that they will in the future. In this issue will be found illustrations of some of the buildings on the college grounds, and more particularly of the class room work of the students. This college was opened in the spring of 1874. Its growth was at first slow, but steady. In the last ten or twelve years its growth and development have been more rapid, until it is now the best equipped purely agricultural college on the continent. It must not be thought that the prime object of an agricultural college is to teach young men how to plow and harrow, or how to sow and reap. On the contrary, the object of the course of study is to give the young men attending the college a thoroughly good all-round education, such as they would get at any college, but with special bearing upon the work of the farm. The practical work of the farm is by no means neglected. The time a student has at his disposal for practical work, however, is limited. A great many of the students are familiar with all

complete and commodious in the country, the student learns of the composition of the soil, plants, animals, feeds, etc., and the relation they bear to each other in the processes of growth, development and conversion from one food product to another.

The course in botany gives a student a knowledge of plant life, of the peculiarities of its growth, germination, flowering, seeding and propagation. Special attention is paid to weeds and the means of exterminating them. The microscope is used to show minute forms of life as the various forms of rust, smut, and other fungus diseases that are injurious to field, garden and orchard crops. The best means of combating these foes are also studied.

The injury done by insects is increasing from year to year, and the loss incurred by their depredations is enormous. Students are therefore given a knowledge of the characteristics, life-history, and habits of the insects which attack the crops



Ontario Agricultural College and Experimental Farm Buildings, Guelph, Ont.

ignoramus is fit for a farmer. If young men only knew it, there is no calling that offers them the inducements that life upon the farm does. There is scope there for brains of the highest order and plenty of room to climb to the top rung of the ladder of success.

The whole tendency of our educational systems is to lead boys away from the farms into the professions. This is all wrong. The object lessons and illustrations in the common school, especially in the country, should be from things in nature, things the boys are familiar with on the farm. In the high schools there should be a course in agriculture leading to a university course in agriculture, so that it would be possible for a farmer's boy, or any other boy, to take a university degree having an education bearing directly on the work of the farm.

Ontario possesses the latter part of such a scheme in her Agricultural College, though her common schools and high schools do not as yet serve as feeders to

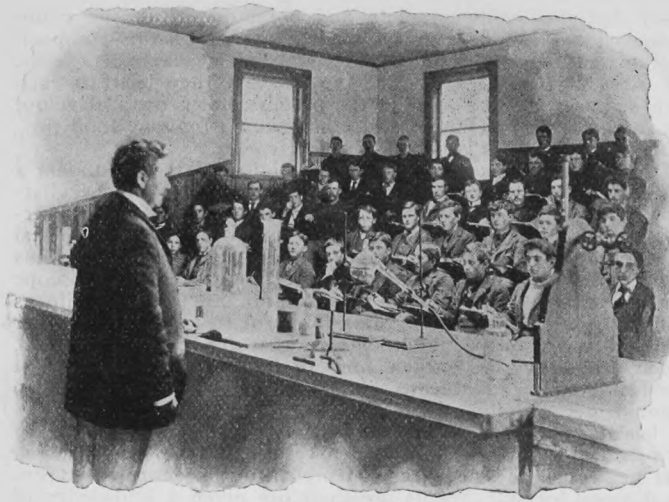
farm operations, therefore the object sought in practical work is to give them a knowledge of the best way of doing a thing without trying to perfect them in the doing of it.

The course of instruction is a very broad and liberal one. Great stress is laid on a thorough grounding in English. Many of the students have had a poor training in this, therefore they receive a thorough course in grammar, composition, and literature. A good grounding in mathematics is part of the course, so that a student will know how to make any ordinary calculation necessary on the farm or in business transactions. To this is added a knowledge of promissory notes, checks, drafts, commercial law, and book-keeping. The natural sciences come in for a good deal of attention. In the physical laboratory students learn of the principles of machinery, ventilation, heating, and of the changes that take place in the condition of the soil. In the chemical laboratory, which is one of the most

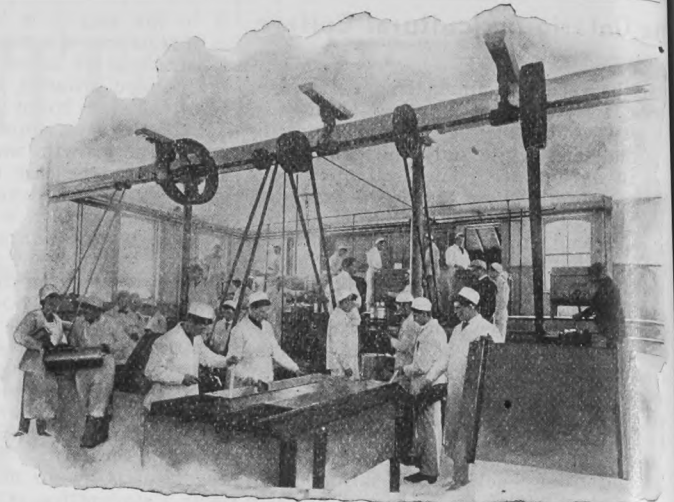
and orchards of the farmer. To this is added the best known methods of exterminating the pests or preventing their ravages.

So important have the little things of this world become that a whole laboratory is devoted to their study. Fitted with the latest appliances for the study of bacteria, the bacteriological laboratory presents to the student an opportunity to study the various microscopic forms of life and their action in connection with agriculture, dairying, plant and animal diseases, and the industrial arts.

A considerable portion of the time of a student is devoted to the study of agriculture proper. This embraces a very wide range of topics, as tillage operations, maintaining fertility, plant food in the soil, application of manures, draining, rotation of crops, farm crops, weeds, etc. The opportunities for studying live stock are good. Representatives of all the leading breeds of cattle, sheep and swine are kept for instruction purposes. Students



Class in Chemistry.



Operating Cream Separators, etc

are taught the characteristics of the different breeds in lectures and by practical demonstration in the class room. They are taught to distinguish between breed and breed the strong and the weak points of each, and to judge and score animals individually. Besides this, lectures are given on the principles of breeding, feeding and the management of live stock, etc. The knowledge gained in the handling of live stock should enable a student to be very successful with his stock on the farm.

A thorough course in poultry raising and management is given, including a knowledge of the leading breeds of fowls, the breeding of them, laying out and construction of buildings, and the use of incubators, brooders, etc. The study of bee-keeping is not neglected. Colonies of bees and apiarian appliances are used to illustrate the lectures.

Special attention is given to dairying. The whole subject is covered most thoroughly from the selection, breeding, and feeding of dairy stock to the manufacture of fine butter and cheese. The course includes practical work in the handling of milk, running cream separators, ripening cream, and churning, in making cheese, and in testing milk, buttermilk and skim-milk. The knowledge gained in this department should be of inestimable value to any young man on the farm.

The course of instruction in horticulture fully covers the subjects of fruit-growing and vegetable gardening and to some extent landscape gardening, floriculture and forestry. Special attention is given to the care and management of the farmer's vegetable garden and to orchards and

small fruit plantations. In the veterinary department the student becomes familiar with the structure of farm animals and of how the various organs of the body work. Also of the causes, symptoms and treatment of a great many of the diseases of

portunity for the practical working out of many of the principles taught in the class room.

Over fifty acres of land, divided into over 2,000 plots, are used for field experiments. Tests are conducted with varie-



Students at Microscopic Work.

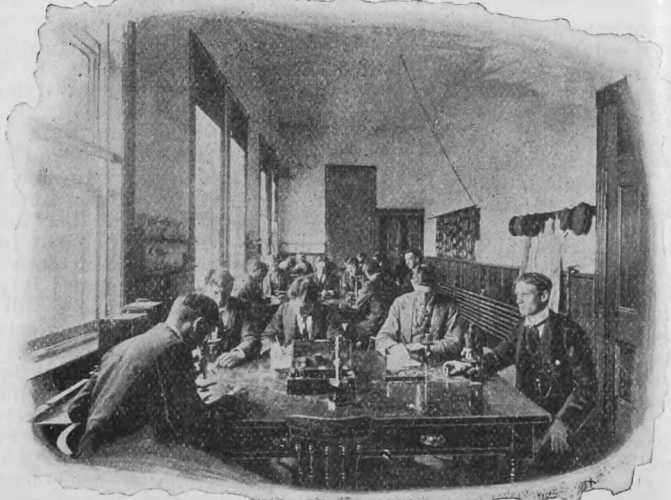
farm animals.

In connection with the college is a large farm, which furnishes work for the students, by which they are enabled to pay part of their expenses while at the college, and at the same time affords an op-

ties of grain, roots, grass, hay, fodder, silage and miscellaneous crops. Also with manures, different methods of cultivation, seeding, etc. In all departments experiments are being conducted, so that the observing student cannot help learn-

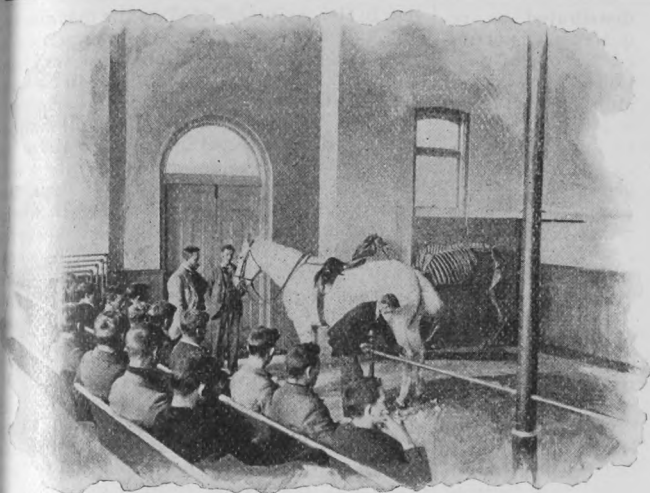


Strawberry Plantation.

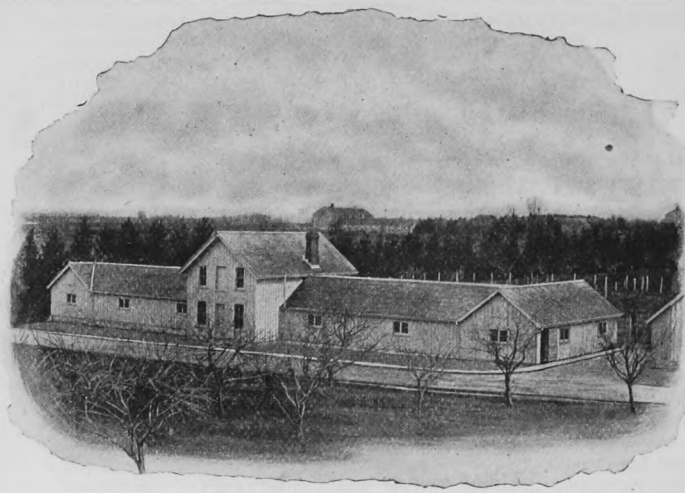


Students at Work in Bacteriological Laboratory.





Practical Horse—Veterinary Department.



Poultry Buildings.

ing a great many things outside the regular course of the college.

Such a course of study and practical observation, faithfully and honestly followed, must equip a young farmer for his work on the farm and give him a lead among his fellow farmers. Every farm-

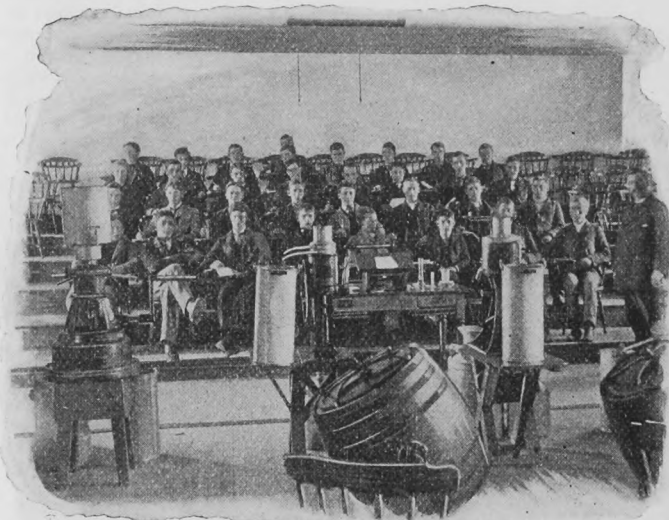
course as that provided at Guelph, enables a farmer to meet those of the other professions on, as it were, terms of equality, to take a high stand in his community, to be a more successful farmer, and to be of great benefit to those around him. There is plenty of scope on the

The annual report of the Ontario Farmers' Institutes shows a very gratifying interest in the work in most counties reported on. In Glengarry county there was an attendance of 600 in the morning and 250 in the evening at Maxville; at Hillsboro, two meetings, 750. The largest afternoon meeting was at Durham, 300. North Ontario has an institute membership of 600. Even these tall figures are not remarkable in counties thickly settled and with many small farms, but they at least show that the interest is growing.

A correspondent of The Farmer had the pleasure of riding on the local from Winnipeg the day the Scotch girls brought out by the Immigration Department went west. He thinks, as did every other passenger on the train, that they are a very intelligent body of young women, and that they will undoubtedly make a decided acquisition to the province. Of the sixty leaving Scotland, four are Irish, two English and the rest Scotch. They all appeared very much pleased with the looks of the prairie. We understand that all these girls have since been placed, and Miss Livingstone, who had charge of them, returns to Scotland to bring out another party. The government pays their passage out, and each girl is pledged to pay a certain sum each month out of their earnings to the government until the cost of their transportation is paid.

J. P. Irwin, Morden:—"I have been much pleased with The Farmer during the past year and consider it a good up-to-date paper that no farmer should be without."

Reader, if you are not already a subscriber, see what is offered on the editorial page of this issue.



Home Dairy Work.

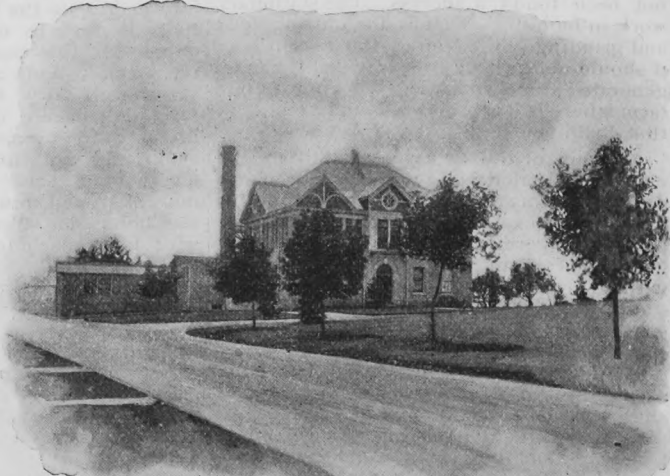
mer's boy should have such a training. To enter any of the learned professions, a special education is necessary, so, too, a young man who is going to follow farm work, should have a training in the calling he intends to follow. The education and experience gained by such a

farm for men of the highest education. Let us have more of them.

Geo. Wood, poultryman, Winnipeg, says his "ad." in The Farmer brought him more orders for poultry this spring than he could fill. Advertising in The Farmer pays.



Judging Cattle



Biological Laboratory.



Experimental Building.

### Electricity for the Farm.

Electricity for operating farm machinery, such as drawing plows, thrashing, cutting

will be largely employed in gardening for quickening germination, forcing growth, and maturing early.

distributed as required. It is claimed that one of these poles can gather and distribute enough electricity to markedly increase vegetable growth on several acres. With this simple apparatus experiments have shown that seeds are so stimulated that a much greater percentage of them germinate than when planted in soil not so treated and the growth of the sprout or plant is much more rapid. If all this be true, as reported, then electricity can and

year in the saving effected on the machine. One of the farmer's heaviest expenses is that for farm machinery, and it is very provident to allow it to stand out in all weathers to rust and rot to pieces.

Now is the time to overhaul all implements used in the spring and get them in shape for next year's work so that they will be ready when wanted. Look over the binders now and see that they are in working order; have all repairs made and worn-out pieces replaced with new ones. Do this while there is plenty of time before the rush for harvest begins. But by all means plan for a good implement straight away.

A young man in the Deloraine district who was on the lookout for a good thing thought he had found what he sought. He saw an advertisement in a paper that for ten cents sent to a certain address he would be told how to make money. He thought the price was cheap enough, so he sent ten cents. By return mail he received a printed slip, bearing words something like these: "To make money, rope suckers, same as we do." — Deloraine Times.



Experimental Grounds.

feed and grinding grain has been a favorite theme with some writers on farm topics. So far, for such work as plowing, etc., it has not been found a success. For stationary work in buildings, such as for cutting feed and grinding grain, there is no reason why it should not be a success provided it can be generated at a cheap rate. We know of one farm where it has been tried and found all that could be desired.

At many of the experiment stations the effect of electricity on the soil has been studied. It seems to act as a distinct stimulus to nature, exerting a marked influence upon the germination of seeds and the growth of farm products. Experiments with an arc light at the Cornell University station showed a marked increase in the growth of vegetables, the electric light causing them to grow all night.

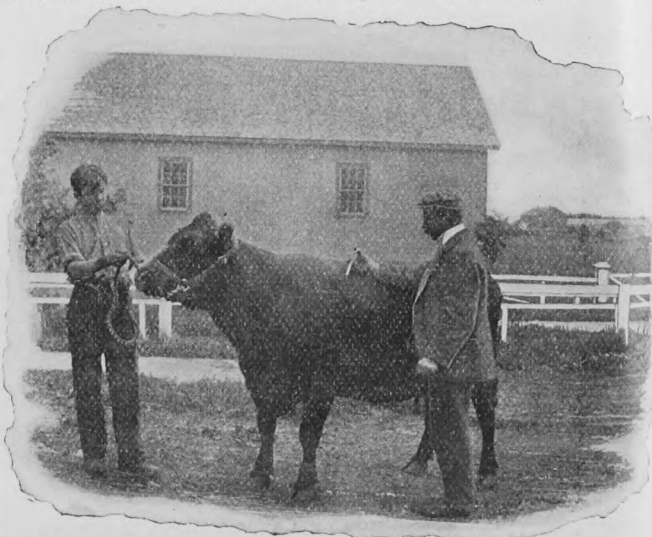
The Maine Experiment station has however shown how electricity can be attracted and conveyed to the ground in a very simple way which any enterprising farmer can try at very small expense. A 50 foot pole is erected with copper points at its upper end connected with buried wires radiating from the foot of the pole. The electricity in the atmosphere is attracted to the copper points, is conveyed to the buried wires and by them

### Care of Machinery.

Farmers from the older provinces are astonished to see the little care given to machinery in this country. Implements are spread all over the farm, left where last used until wanted again, and not infrequently an acre or more of ground around the house is strewn with farm machinery of one kind and another. While the iron work may not rust as quickly as in Ontario, yet it does rust, and all implements would last longer if suitable shelter was provided for them.

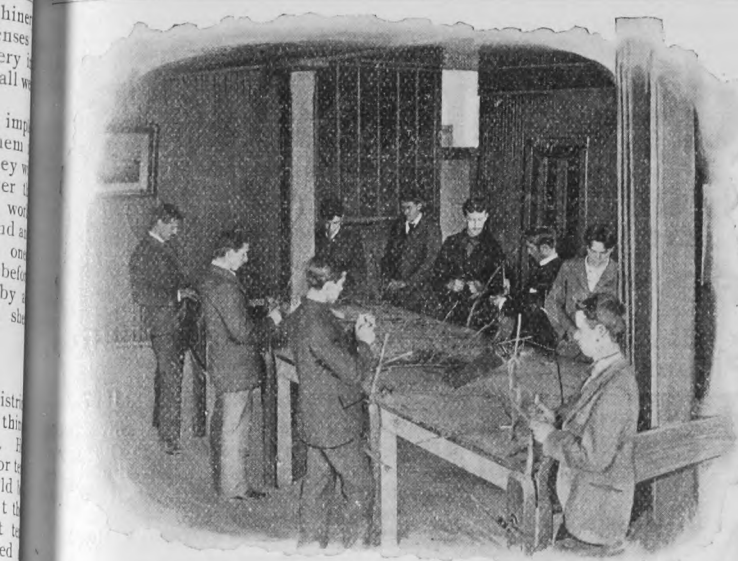
A shed covered with tar roofing paper can be built very cheaply and would more than pay for itself every

The Emerson Journal reports that a storekeeper at Stuartburn is shipping young moose to England at \$1,200 a pair.



Injecting Tuberculin.





Students Grafting, Horticultural Department.

### Our Wheat in New South Wales.

The experiments made in New South Wales last year to acclimatise Manitoba wheat, have not, it appears, met with a great deal of success. The Sydney Morning Herald refers as follows to the attempt:—"Owing to the extreme dryness of the season, the Manitoba wheat with which endeavors were made to acclimatise, has scarcely had a fair trial. In some places, notably in the low-lying country, the patches sown last year were a complete failure. In the high lands however, more success was experienced. Messrs. H. M. Sutton & Co., who sent out a number of samples for trial in various districts, inform us that with one exception they were all more or less a failure. The sample sent to the Glanmyre Estate at Bathurst, turned out exceptionally well, being not only true to name, but even better than the seed sown. Grown side by side with other varieties of wheat the yield, though small, owing to the dry season, exceeded all others, even the white Lammats. Sydney millers offered extreme prices for the product of the limited number of acres sown, but it is intended to dispose of it as seed. This wheat was sown at the end of June or early in July, and cut on December 20th, and there was practically no rain in the interval. The wheat averaged 5 bushels to the bag, which means a saving in bags and in handling."

### A Simple Fire Extinguisher for the Barn.

Hand granades, the simplest form of fire extinguisher, can be made at home cheaply and easily. And it is well to have at hand a simple contrivance for extinguishing a small fire at its start. Take twenty pounds of common salt and ten pounds of sal ammoniac (nitrate of ammonia, to be had of any druggist), and dissolve in seven gallons of water. Procure quart bottles of thin glass, and fill with this, corking tightly and sealing to prevent evaporation. In case of fire, throw so as to break in or near the flame. If the fire is

### Growing Tobacco.

Tobacco has been successfully experi-

in such a place as to prevent the bottle from breaking, as in wool or cotton, knock off the neck and scatter the contents. The breaking of the bottle liberates a certain amount of gas, and the heat of the fire generates more, thus working its own destruction.—Scientific American.

J. W. Cochrane is erecting a 30,000 bushel elevator at Stockton. This will be a great convenience to the farmers of that vicinity.

in connection with tobacco growing is fighting the worms.—Dauphin News.

### Wearing Out the Soil.

Recently the fact has been made plain that fifty or sixty years cropping and exposure to washing rains will greatly reduce the productive capacity of that wonderfully rich section of the State of Texas known as the black belt. Most of the soils in Texas will give out in twenty years, or at the most thirty years, and farmers are now beginning to see that they will have to take some steps to build up their worn out lands. Cow peas and clover are the two crops that they are using. The day is fast approaching when the supposedly inexhaustible fertility of the prairie land of Manitoba will show signs of being exhausted by continuous wheat cropping. The day is coming, sooner or later. The farmers on the rich prairies of Illinois and other States of the Union have found that their soils are becoming diminished in fertility, and are taking steps to restore fertility again, before their lands become completely exhausted. History will repeat itself in Manitoba. Wise, indeed, will be the farmer, who, by judicious cropping, the introduction of large numbers of stock, and the application of manure, will retain and build up the fertility of his soil before it has become completely exhausted.

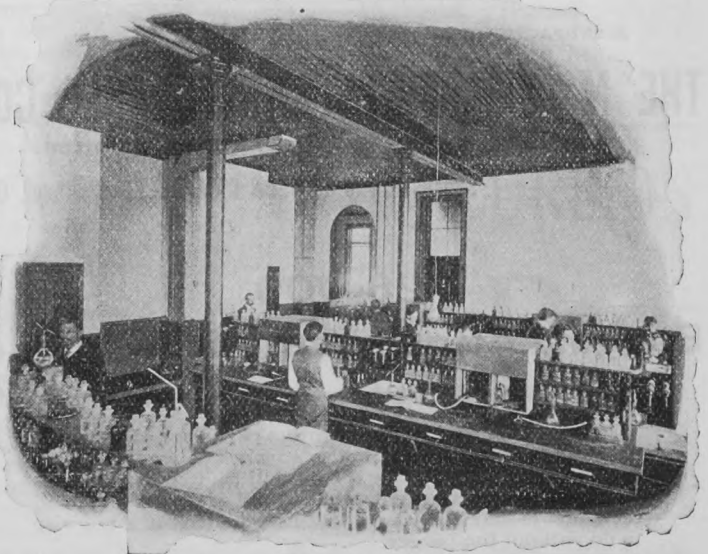
Mr. J. S. Winder, of Foxwarren, has something of a freak in the shape of a well. It is forty feet deep, and is supplied on an average with about eight or nine feet of water—excellent water, too. Three good sized streams flow in at one side, and one at the other. But the freak feature lies in the fact that the water in the well rises and falls as regular as the tide, the depth changing about three or four feet. The highest point is reached at noon, and it falls back at night.

J. Chewing, Cypress River, had wheat over 32 inches long on 20th June. This is the longest growth so far reported.

From Treherne, westward, crops are in very fine shape indeed.



Field of Hay.

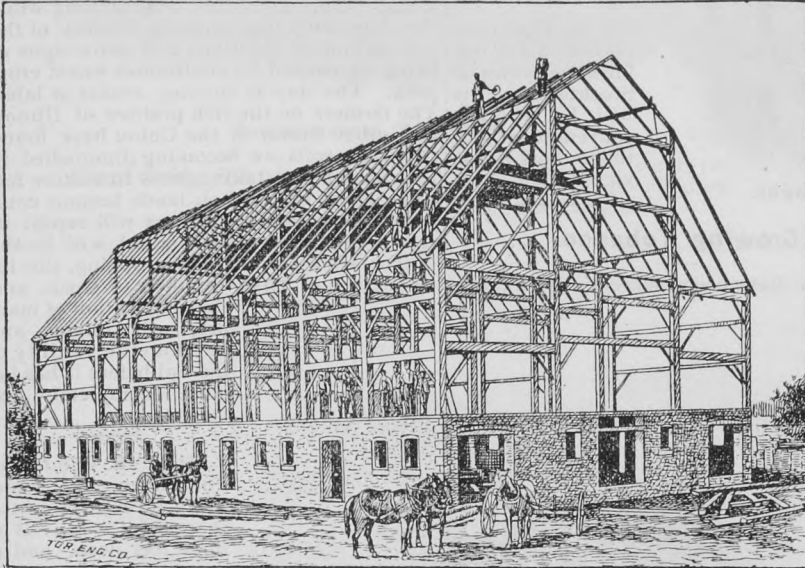


Practical Work in Chemistry.

# THE Thorold Cement

HIGH IN QUALITY.  
LOW IN PRICE.  
56 YEARS IN USE.

The Leading Cement for Building Bank Barns, Cement Floors in Stables, Silos, Culverts, Piggins, etc.



**Mammoth Barn of Beswetherick Bros., near Hagersville, Ont.**

Floors for horses and cattle were put in this barn with Battle's Thorold Cement.  
Has been Tested in Every Capacity. Most Perfect Cement Made.

Hagersville, Ont., July 1st, 1897.

We used THOROLD CEMENT in our stable floors, and we must say it has given us good satisfaction in every particular. Our floors are as hard as stone. We can truly say it is just perfection for stable floors.

BESWETHERICK BROS.

Kintyre, Elgin Co., Ont., Oct. 26th, 1896.

I built concrete basement with THOROLD CEMENT under my barn, 36 x 55 x 8 ft. high from bottom of foundation; footing for foundation 18 in. deep, and 20 in. wide; footing of concrete above foundation 14 in. thick at bottom and 12 in. thick at top.

I also built a wing to barn 15 ft. wide, same length as barn, with concrete foundation 2 ft. high. I used 96 barrels cement, and 46 loads gravel. I mixed five parts gravel to one part cement.

My walls are hard and dry, and I can thoroughly recommend your THOROLD CEMENT to all farmers who want first-class basements for stabling.

JOHN MCRAE.

TO ANY FARMERS—who will club together and send us an order for 400 or 500 barrels, we will send FREE OF ANY CHARGE, a thoroughly competent mason and builder—who is also a practical farmer—who will lay out all work and give full instructions. For Free Pamphlet address:

**ESTATE OF JOHN BATTLE, THOROLD, ONT.**

## THE FAMOUS CHATHAM FANNING MILLS.

**50,000  
CHATHAM MILLS  
NOW IN USE.**

The Mill will clean Alsike Clover Seed to perfection.

1,000 Mills Sold in 1884
1,300 " " 1885
2,000 " " 1886
2,300 " " 1887
2,500 " " 1888
2,630 " " 1889
4,000 " " 1890
4,500 " " 1891
5,000 " " 1892
6,000 " " 1893
6,000 " " 1894
4,000 " " 1895

\*Got burnt out.  
7,000 Mills Sold in 1896  
8,000 " " 1897

**Four Times More than have been  
Sold by All the Factories  
in Canada put  
together.**

**IT WILL SAVE YOU DOLLARS  
IF YOU BUY ONE.**

MANUFACTURED BY:

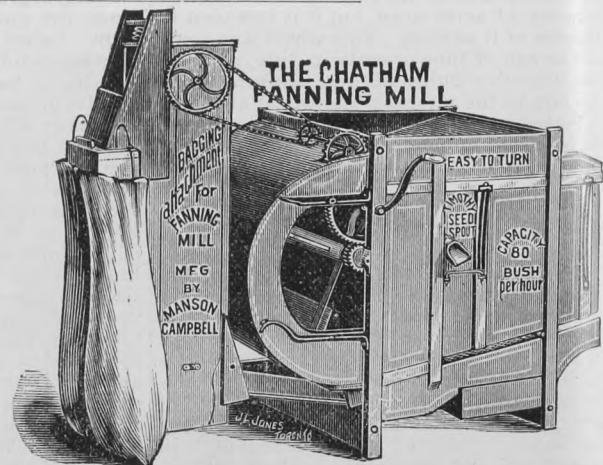
**THE M. CAMPBELL FANNING MILL CO.,**  
Of Chatham, Limited.

Successors to MANSON CAMPBELL, Chatham, Ont.

**- 28,000 -**

**Bagging Attachments Now in Use.**

Bagging Attachment is run with a chain belt that cannot slip. The elevator cups are also attached to endless chain that cannot slip nor clog. The mill is fitted with screens and riddles to clean and separate all kinds of grain and seed, and is sold with or without bagger; but it is not wise to do without the bagger.



**SATISFACTION GUARANTEED.**

Send for our book entitled "How to Make Dollars Out of Wind; or The Success of Farming."—Sent free on application.





### An Aim.

Give me a man with an aim,  
Whatever that aim may be,  
Whether it's wealth or whether it's fame,  
It matters not to me.  
Let him walk the path of right,  
And keep his aim in sight,  
And work and pray in faith away  
With his eyes on the glittering height.

Give me a man who says,  
"I will do something well,  
And make the fleeting days  
A story of labor tell."  
Though the aim he has is small,  
It's better than none at all;  
With something to do the whole year  
through  
He will not stumble or fall.

But Satan weaves a snare  
For the foot of those that stray,  
With never a thought or care  
Where the path may lead away;  
The man who has no aim,  
Not only leaves no name  
When this life is done, but ten to one  
He leaves a record of shame.

Give me a man whose heart  
Is filled with ambition's fire,  
Who sets his mark in the start,  
And keeps moving higher and higher,  
Better to die in the strife,  
The hands of labor rife,  
Than to glide with the stream in an idle  
dream

And live a purposeless life.

Better to rise and climb  
And never reach the goal,  
Than to drift along with time,  
An aimless, worthless soul.  
Aye, better to climb and fall,  
Or sow, though the yield be small,  
Than to throw away day after day,  
And never strive at all.

### Mrs. Tubbs at the Sewing Circle.

Hand me the bastin' thread, Mis' Little. (Looks about.) I'm so glad we've got this corner to ourselves, for if there's one thing above another that I dislike about these sewin'-circles, it's bein' obliged to set in a roomful of women and not have a chance to get in a word edgeways. Not that I'm much of a talker. All our family, on the Kilgore side, are rather quiet, but I like to have my say, now an' agin. (Sneezes.)

I got a dretful cold at Miss Parson's funeral; sot right in a draft, but 'twas the only place I could get, where I could see the mourners. I couldn't help thinkin' how gratified she'd been, if she'd seen the crowd; and such a lot of flowers. Poor woman, she took such pride in her flower beds! I suppose Parsons will be gettin' married before she's fairly cold in the ground. They say Melissy Jenkins went right over there, as soon as the breath left Mis' Parsons's body, an' stayed 'til after the funeral. I was over Tuesday, the day before she was buried, and I thought I'd jest step down suller, and see what there was in the house, and I declare if I didn't find Melissy down there, a-countin' the cans of preserves and pickle-lily. I s'pose she was a-peekin' round to see if Parsons was a good poverider.

Speakin' of Melissy, they say her cousin, that freckle-faced Smith girl, is really

goin' to ketch Squire Stebbins; I can't say how true it is, but I know she made him a syrup for his cough last winter, and knit him four pairs of feetin' for a Christmas present. Straws tell which way the wind blows, you know. The squire's got a good house—water, with fassets to turn it on, right in the sink, and everything new-fashioned—but he's as close as the bark to a tree. When we gave the strawberry festival, to get a new carpet for the meetin'-house, he sent a quart of skim-milk for the coffee and a pat of winter butter, strong enough to start tears in your eyes!

Melissy'll be his, one, two, three—yes, his third wife. She's awful shiftless and don't know nothin' at all about house-keepin'. I don't believe she knows how to make a pan of sour-milk biscuits, or fry a mess of flap-jacks, to save her life! Humph! I should hate to marry a man that hadn't bought a gravestun for his first wife—let alone the other two. Mis' Stebbins had jest bought her a new pair of congress shoes, before she was taken sick, and if you'll believe it, Stebbins sold 'em to Sophrony Swett for a quarter more'n she give for 'em. I know, for I was with her when she bought 'em.

Speakin' of shoes makes me think of the pair Marthy Meekins wore to the Browns' huskin'; they were them new kind with shiny toes—must have cost two dollars, if they did a cent! Well, what do you think I saw, when Jonas Leavitt swung her in the Virginny Reel? Why, a hole in her stockin' as big as the end of that spool! That spilt the looks of them shoes for me!

Marthy always was lazy and dretful extravagant. She hired out to Deacon Powers's, but they didn't keep her long. Mis' Powers told me she wasted more'n her wages come to; would wash the dishes with hard soap, and grease the cake tins with butter every time! I warn't surprised, for I was over to her mother's one day and Mis' Meekins was pickin' her rags over. She mixed the white and colored right up together, and at that time white rags was a fetchin' a half cent more a pound than colored; and, as true as I set here, there was pieces of white cotton cloth in them rags, as big as my hand! It fairly made me shiver to see such extravagance.

There! that spool has rolled clear under your chair. That's kind of a pretty mat you're a-standin' on. I've got one to home, with a black and white dog on it, looks most nat'ral enough to bite. Poor old Parson Bemis came to tea one night—he's kinder near-sighted, you know—and I declare for it, if he didn't snap his fingers to that dog, thinkin' he was alive.

Hi hum! I don't do much drawin' in now days. Sence Jotham got married and fetched his wife home, it takes 'bout all my time to wait on her. Sometimes I think I can't stand her city ways another day; then I think he's got the worst of it, poor boy! She don't know how to make sassage more'n a baby, and I do wish you could have seen the mitten she tried to knit for Jotham! The thumb is about as big as a pipe-stem. The way she goes on over an old-fashioned sugar-bowl and a brass warmin'-pan she found in the attic would make you sick! Strange, how boys will get took in! Girls ain't what they was in my days.

Did you go to the minister's donation party last week? What a sight of stuff they did get! It seems to me preachin' pays better than anything else. The front room was jest filled! There was nineteen pin-cushions of every shape you could think of, besides eight strawberry emerics. There was four tidies,—real pretty ones, too—and a lamp-mat with a border of grapes, in purple worsted.

Mis' Sykes sent 'em her crutches. Her broken leg is all right now and the crutch-

### YOU CAN'T DO WITHOUT IT

If you are going to furnish your home—our big Catalogue—containing over 300 illustrations. Mailed free.

### SCOTT FURNITURE CO.

Wide Awake House,  
WINNIPEG.

es warn't hurt a mite. She said if they didn't need 'em now, no knowin' how soon they would, and she believed in makin' useful presents. She said that to hit off Manda Hodge, because she gave 'em a wreath of wax flowers. I sent in a hain; 'twas a little mite musty, but I thought it might do when they didn't have company. Mis' Jenks sent a peck of apples, every one of 'em windfalls! If that ain't stinginess, I don't know what is; but that's the way some folks makes their money. You know they've jest put up a new barn and they do say Jenks got full as a tick at the raisin'! But there! You can't tell much by what you hear, and I make a pint of never sayin' nothin' ag'in nobody; for if there's any one thing I despise it's to hear a body slander their neighbors.

I declare, Mis' Little. I most forgot to ask you about your darter Ketury's beau! Is she really keepin' company with that city feller? Don't you think he seems dretful pindlin. His hands don't look as if he ever did a day's work in his life, and if that narrer chest of his don't mean consumption, then I ain't no prophet.

What't that? Miss' Pike says tea is ready? Well, I hope it will be better than we had the last time the circle met here. Go, right out, don't wait for me. I'll fold my work up and come right along.

There! I'm glad they're gone, for I wanted a chance to smooth my hair and set my cap straight. I heard Elder Twombly come in a few minutes ago. Dear man, what a lonely life he leads since his wife died. How he did praise my biscuits last week, and the way he eat the raspberry jam spoke plainer than words! Well, well, one can't never tell what may happen! If duty pints that way, I shan't say no, and—yes, I'm coming—if I do say it, he might find a worse helpmeet in Slanderville than Tabitha Tubbs!—Belle Marshall Locke.

An old housekeeper tells us that yeast—just ordinary, every-day yeast ferment—makes the very best kind of paste. We have sometimes eaten half-baked bread in which the stick-to-it-ive qualities of the yeast were very highly developed.

John Aikenhead, Hartney:—"Mrs. Aikenhead takes good care of The Nor'-West Farmer. Your paper helps her a great deal, every number of it. We will be pretty hard up if we ever give it up."

## AN EXCURSION TO Elm Park WINNIPEG,

Will prove delightful. Get one up in your locality.

For further particulars write—

G. A. YOUNG, Mgr., Winnipeg.

### Don't Worry, Dear.

Don't worry, dear. The bleakest years  
That clog the forward view  
Each thins to nothing when it nears,  
And we may saunter through.  
The darkest moment never comes,  
It only looms before,  
The loss of hope is what benumbs,  
Not trouble at the door.

Don't worry, dear. The clouds are black,  
But with them comes the rain,  
And stifled souls that parch and crack  
May thrill with sap again.  
The burden bear as best we can,  
And there'll be none to bear,  
Hard work has never killed a man,  
But worry did its share.

Don't worry, dear; don't blanch, don't  
yield,  
But dare the years to come,  
Nor give the enemy the field  
Because he beats the drum.  
These little woes that hover near  
Are nothing, though they gall.  
We know that life is love, my dear,  
And life and love are all.

—Samuel Merwin in *Youth's Companion*.

### Water and How to Drink It.

The fact that the demands of nature require that men drink large quantities of water during the hot days of summer, and that this requirement is especially great for those who must work hard during hot weather, give especial value to remarks recently published by the London journal, *Health*. These observations are applicable to all seasons and show how pure water may be so used as in many cases to obviate the necessity for the use of medicines.

The effects produced by the drinking of water vary with the manner in which it is drunk, says *Health*. If, for instance, a pint of cold water be swallowed as a large draught, or if it be taken in two portions with a short interval between certain definite effects will follow—effects which differ from those which would have resulted from the same quantity taken by sipping.

#### EFFECTS OF SIPPING.

Sipping is a powerful stimulant to the circulation—a thing which ordinary drinking is not. During the action of sipping the action of the nerve which slows the beats of the heart is abolished, and, as a consequence, that organ contracts much more rapidly, the pulse beats more quickly, and the circulation in various parts of the body is increased. In addition to this, we also find that the pressure under which the bile is secreted is raised by the sipping of fluids—a fact the importance of which we shall notice directly.

Many individuals may have been at times unpleasantly unconscious of the fact that a glass of wine or beer sipped gets into the head much quicker than if drunk at a draught. They will now be in a position to understand why this is so; the explanation being that the temporary paralysis of the inhibitory nerve of the heart, and the increased stimulation of the circulation, favor the rapid absorption of the alcohol and the production of its consequent effects. The same thing occurs if effects of sipping and sucking are identical. The fluid be sucked through a straw, the

Swallowing in the usual way has not the stimulant effects of sipping, but it has one or two special effects not produced by sipping, the use of which we shall mention a little later.

#### EFFECTS OF DRINKING.

The effects of drinking cold water are these: If, say, a pint of cold water is

swallowed straightway, the temperature of the body is slightly lowered—about 1° F.—the pulse rate is somewhat decreased (not greatly increased, as by sipping), and the respirations are slightly accelerated. The blood vessels in the lining membrane of the stomach are at first contracted. They very soon, however, rapidly dilate, the blood flow in them is increased, and the secretion of gastric juice is stimulated. There are, on the other hand, many persons who find that these effects are brought about better if they take warm water instead of cold, although at first it may appear somewhat strange that like effects are produced by both hot and cold water. The explanation is simple. The

warm water acts exactly as does the cold only without the previous contraction, the action being to at once dilate the vessels after its reception by the stomach. The practice of drinking at meals large quantities of liquid is bad, but small quantities may be taken without harm, although, undoubtedly, it is wiser to drink either before or after the meal, if we cannot limit our consumption of fluids to a distinctly small amount. Whenever a meal is particularly rich in fatty material it is a good plan to drink some time after the meal, in this way the digestion of fat in the intestines is aided.

That water possesses a purgative action is a thing well known to many people.



## Manitoba Marble & Granite Works

HOUKES & WHEELDON, PROPRIETORS.

*Manufacturers of Monuments, Headstones and Cemetery Work  
of every description.*

Satisfaction guaranteed. We import direct from the quarries by the car load and are in a position to give you the advantage of quality and price.

WORKS AND OFFICE—

231 NOTRE DAME AVE. (near Grace Church)

WINNIPEG, MANITOBA.

Middlechurch, Man.,

May 18th, '98.

Messrs. Lever Bros.,

Toronto.

Dear Sirs:--

Having seen in *The Nor'-West Farmer* that you are offering Pictures for Sunlight Soap wrappers, I now have much pleasure in forwarding 12 wrappers. I would like to say how very highly I think of your Soap, and am consequently recommending it to my friends. By following the instructions, my washing day has lost most of its terrors for me, and I find your Soap a great saving on the clothes. There is so very little rubbing required and the Soap lasts and goes so much further than any other I have ever used.--Yours truly, E. EMES.



SIMPLE  
OPERATION.  
A PAIR IN  
30 MINUTES.

### Home Work for Families.

WE WANT the services of a number of families to do work for us knitting Seamless

**Bicycle Stockings,  
Woodmen's Socks, and  
Motormen's Mittens.**

WE FURNISH machine and material under contract to **Reliable Families Only**. Yarn is very light, and by sending it out and having it returned by parcel post as finished, we are enabled to employ a larger number of people, and thereby save taxes, insurance, and interest on money.

**STEADY WORK and GOOD PAY**

(whole or spare time) to those who make prompt returns. For particulars ready to commence send name and address:

THE CO-OPERATIVE KNITTING CO.,  
Georgetown, Ont.



This particular effect is due to its power of stimulating the secretion of bile and also of increasing the peristaltic action of the intestines; bile being a natural purgative, and increased peristalsis being an enemy of constipation and sluggish bowel action. If plain water be taken, its purgative effects are best produced by its being cold; if natural mineral waters are taken they should be mixed with a small quantity of hot water so as to be at about the same temperature as the stomach. Warm water is more readily absorbed than cold, and moderate quantities than large ones, absorption being retarded if large quantities of either warm or cold water are taken at once. The best time to obtain the purgative effects of water is on rising in the morning. A glass of cold water taken on rising is often quite sufficient to procure an easy movement of the bowels, and this result will be the more certain if the water is sipped while dressing. This sipping operation should not, however, be hurried but should be gone through slowly and at short intervals.

Free drinking of water produces effects upon the kidneys and tissues of the body generally no less important than those we have been considering. There is every reason to believe, from observations, the nature of which it is unnecessary for me to state, that the increased excretion of urine which follows the drinking of plenty of water not only clears the body of many poisonous and effete substances, but is itself an index of changes within the body which have for their end the enhanced health and comfort of the individual. [But it is all-important that the water be filtered pure from organic and also mineral ingredients—Editor M. M. S.] Much harmful material which has often to answer for malaise, want of energy, and various aches and pains, is undoubtedly washed out of the tissues and excreted by the kidneys as the result of free (pure) water drinking. This alone is decidedly beneficial, but, in addition, the drinking of much water causes the tissues to be changed, with the result that vitality is increased and strength augmented. So great in this direction are the effects of cold water, that persons leading sedentary lives may often obtain, by drinking plenty of water, much of the feeling of health and exhilaration which results from taking exercise—a fact not difficult of belief when we remember that a glass of cold water, slowly sipped, will produce greater acceleration of the pulse for a time than will a glass of wine or spirits taken at a draught. In this connection, too, it may not be out of place to mention the fact that sipping cold water will often allay the craving for alcohol in those who have been in the habit of taking too much of it, and who may be endeavoring to reform, the effect being, probably, due to the stimulant action of the sipping.

### Remarkable Laws of Nature.

A man will die for want of air in five minutes, for want of sleep in ten days, for want of water in a week, and for want of food at varying periods, dependent on circumstances. When one falls asleep, the surrender of sight, taste, smell, hearing and touch is necessary. The sense of touch is the lightest sleeper and most easily awakened, then hearing, then sight, while sluggish taste and smell waken last. The human body is an epitome in Nature of all mechanics, all hydraulics, all architecture, all machinery of every kind. There are more than 310 mechanical movements known to mechanics to-day, and all these are but modifications of those found in the human body.

### Thy Will.

Dear Lord, my will from Thine doth run  
Too oft a different way;  
I cannot say, "Thy will be done"  
Through all life's darkened day.  
My heart grows chill to see Thy will  
Turn all earth's gold to gray.

My will is set to gather flowers,  
Thine blights them in my hand;  
Mine reaches for life's sunny hours,  
Thine leads through shadow-land;  
And all my days go on in ways  
I cannot understand.

Yet more and more this truth doth shine  
From failure and from loss;  
The will that runs transverse to Thine  
Doth thereby make its cross.  
Thine upright will cuts straight and still  
Through pride and dream and dross.

But if in parallel with Thine  
My will doth meekly run,  
All things in heaven and earth are mine,  
My will is crossed by none;  
Thou art in me, and I in Thee—  
Thy will and mine are done.

### Folly of Borrowing Trouble.

There are some unhappy persons who seem fated to go through life with a constitutional tendency to despondency. We all know them and meet them daily, and they can always see a cloud where none exists. With most of these persons, however, it is simply a matter of exercising the will. Anxiety about present trouble or prospective difficulties never brought any good to those who indulged in it. The successful ones in life are those who have been buoyant in spirit and who resolutely refuse to allow the cares of life to unduly depress them. Instead of allowing the mind to brood over things that cannot be helped, it should be set to work upon the duty that lies nearest to it. Worrying about matters does not improve them in the slightest degree. On the contrary, it weakens the purpose, robs the physical nature of its vitality and totally unfits us to cope with the obstacles that lie in our path. The most shocking mistake, and one that is unfortunately only too frequently made, is to meet troubles half way. These will come soon enough. They don't want any encouragement, and very often when they do come they are not half so formidable as we imagined they would be. Anticipation in some cases is worse than the reality.—New York Ledger.

### A Simple Way of Destroying Ants.

Ant hills on the lawns around the house are very troublesome, but they can be easily destroyed with a little carbon bisulphide. The best plan is to make a hole about six inches deep in the centre of the ant hill with the end of a hoe or rake handle. Put in this a tablespoonful of the liquid and close the hole immediately with soil. The carbon bisulphide, which can be had from any druggist, is very volatile and will permeate the soil in all directions. It destroys animal life, but will not injure vegetation. It must be kept away from fire, as it is very inflammable.

There are other ways of killing them, but none so good as the above. Coal ashes, saturated with coal oil, is very offensive to them and will drive them away. Spread it around their hills. They are very fond of sweet oil, but it has a peculiar action on them. It closes their spiracles, the air passages through which they receive their supply of air, and thus suffocates them. A bottle with a little of the oil in it makes a good trap.

## 5,000 $\frac{1}{4}$ lb. (quarter pound) TEA FOR NOTHING.

To introduce my famous Ceylon Tea at 35c. I will send a FREE SAMPLE of a  $\frac{1}{4}$  pound for nothing. This tea is the finest sold for money anywhere, w. 11 w. th 50c. Selling it fast. Everyone pleased with it. Send your order. Also a Japan at same price. Freight prepaid on all tea sold.

J. E. ACTON, TEA MERCHANT, WINNIPEG.

## Drinks..

—FOR—

## Hot Weather..

### HOWARD'S ROOT BEER

A 10 cent bottle will make five gallons of a refreshing, non-alcoholic and delightful drink.

### LIME JUICE

25 cents a bottle.

### LIME JUICE CAPSULES

Can be carried in the pocket—dissolve one in a glass of water.

### LEMONADE TABLETS

10 cents a bottle.

WHEN IN TOWN, CALL AND SEE US.

## John F. Howard & Co.

Chemists and Druggists

Opposite Post Office, - WINNIPEG.

### HOWARD'S HARD WATER TOILET SOAP

Is still growing in favor—can be bought from most stores in country.

## CANADIAN PACIFIC RAILWAY.

### EAST VIA THE LAKE ROUTES

AT GREATLY REDUCED RATES.

### STEAMERS LEAVE FORT WILLIAM

Alberta ..... every Friday.  
Athabasca ..... " Sunday.  
Manitoba ..... " Tuesday.

Steamboat express leaves Winnipeg every Monday, Thursday and Saturday at 16.30, making direct connection with steamers.

### KLONDYKE.

Direct via C.P.R. Steamers to Wrangel Glenora and Skagway.

### S.S. TARTAR and ATHENIAN

The largest steamers engaged in the Yukon trade, specially fitted for the passenger traffic, having superior accommodation for all classes, will sail from Vancouver and Victoria every Thursday.

Write for pamphlet descriptive of routes to the Yukon and other particulars in connection with the Klondyke.

Apply to nearest C.P.R. agent, or address  
ROBERT KERR,  
Traffic Manager,  
Winnipeg.

## Cranford.

(Continued from Last Issue.)

## CHAPTER X.

I think a series of circumstances dated from Signor Brunoni's visit to Cranford, which seemed at the time connected in our minds with him, though I don't know that he had anything really to do with them. All at once all sorts of uncomfortable rumors got afloat in the town. There were one or two robberies—real bona fide robberies; men had up before the magistrates and committed for trial—and that seemed to make us all afraid of being robbed; and for a long time, at Miss Matty's, I know, we used to make a regular expedition all round the kitchens and cellars every night, Miss Matty leading the way, armed with the poker, I following with the hearth-brush, and Martha carrying the shovel and fire-irons with which to sound the alarm; and by the accidental hitting together of them she often frightened us so much that we bolted ourselves up, all three together, in the back-kitchen, or store-room, or wherever we happened to be, till when our affright was over, we recollected ourselves, and set out afresh with double valiance. By day we heard strange stories from the shopkeepers and cottagers, of carts that went about in the dead of night, drawn by horses shod with felt, and guarded by men in dark clothes, going round the town, no doubt in search of some unwatched house or some unfastened door.

Miss Pole, who affected great bravery herself, was the principal person to collect and arrange these reports so as to make them assume their most fearful aspect. But we discovered that she had begged one of Mr. Hoggins's worn-out hats to hang up in her lobby, and we (at least I) had doubts as to whether she really would enjoy the little adventure of having her house broken into, as she protested she should. Miss Matty made no secret of being an arrant coward, but she went regularly through her house-keeper's duty of inspection—only the hour for this became earlier and earlier, till at last we went the rounds at half past six, and Miss Matty adjourned to bed soon after seven, "in order to get the night over the sooner."

Cranford had so long piqued itself on being an honest and moral town that it had grown to fancy itself too genteel and well-bred to be otherwise, and felt the stain upon its character at this time doubly. But we comforted ourselves with the assurance which we gave to each other that the robberies could never have been committed by any Cranford person; it must have been a stranger or strangers who brought this disgrace upon the town, and occasioned as many precautions as if we were living among the Red Indians or the French.

This last comparison of our nightly state of defense and fortification was made by Mrs. Forrester, whose father had served under General Burgoyne in the American war, and whose husband had fought the French in Spain. She indeed inclined to the idea that, in some way, the French were connected with small thefts, which were ascertained facts, and the burglaries and highway robberies, which were rumors. She had been deeply impressed with the idea of French spies at some time in her life; and the notion could never be fairly eradicated, but sprang up again from time to time. And now her theory was this: The Cranford people respected themselves too much, and were too grateful to the aristocracy who were so kind as to live near the town, ever to disgrace their bringing up by being dishonest or immoral; therefore, we must believe that the robbers were strangers—if strangers,

why not foreigners?—if foreigners, who so likely as the French? Signor Brunoni spoke broken English like a Frenchman; and, though he wore a turban like a Turk, Mrs. Forrester had seen a print of Madame de Stael with a turban on, and another of Mr. Denon in just such a dress as that in which the conjurer had made his appearance, showing clearly that the French, as well as the Turks, wore turbans. There could be no doubt Signor Brunoni was a Frenchman—a French spy come to discover the weak and undefended places of England, and doubtless he had his accomplices. For her part, she, Mrs. Forrester, had always had her own opinion of Miss Pole's adventure at the "George Inn"—seeing two men where only one was believed to be. French people had ways and means which, she was thankful to say, the English knew nothing about; and she had never felt quite easy in her mind about going to see that conjurer—it was rather too much like a forbidden thing, though the rector was there. In short, Mrs. Forrester grew more excited than we had ever known her before, and, being an officer's daughter and widow, we looked up to her opinion, of course.

Really I do not know how much was true or false in the reports which flew about like wildfire just at this time; but it seemed to me then that there was every reason to believe that at Mardon (a small town about eight miles from Cranford) houses and shops were entered by holes made in the walls, the bricks being silently carried away in the dead of night, and all done so quietly that no sound was heard either in or out of the house. Miss Matty gave it up in despair when she heard of this. "What was the use," said she, "of locks and bolts, and bells to the windows, and going round the house every night? That last trick was fit for a conjurer. Now she did believe that Signor Brunoni was at the bottom of it."

One afternoon, about five o'clock, we were startled by a hasty knock at the door. Miss Matty bade me run and tell Martha on no account to open the door till she (Miss Matty) had reconnoitered through the window; and she armed herself with a footstool to drop down on the head of the visitor, in case he should show a face covered with black crape, as he looked up in answer to her inquiry of who was there. But it was nobody but Miss Pole and Betty. The former came upstairs, carrying a little hand-basket, and she was evidently in a state of great agitation.

"Take care of that!" said she to me, as I offered to relieve her of her basket. "It's my plate. I am sure there is a plan to rob my house to-night. I am come to throw myself on your hospitality, Miss Matty. Betty is going to sleep with her cousin at the 'George.' I can sit up here all night if you will allow me: but my house is so far from any neighbors, and I don't believe we could be heard if we screamed ever so!"

"But," said Miss Matty, "what has alarmed you so much? Have you seen any men lurking about the house?"

"Oh, yes!" answered Miss Pole. "Two very bad-looking men have gone three times past the house, very slowly; and an Irish beggar-woman came not half-an-hour ago, and all but forced herself in past Betty, saying her children were starving, and she must speak to the mistress. You see, she said 'mistress,' though there was a hat hanging up in the hall, and it would have been more natural to have said 'master.' But Betty shut the door in her face, and came up to me, and we got the spoons together, and sat in the parlour-window watching till we saw Thomas Jones going from his work, when we called to him and asked him to take care of us into the town."

THE most beautiful colored picture of all wild, fur-bearing animals of our country (46), with photo engraving of their skins. Nothing like them in the world. Worth \$1.00; sent postpaid for 6 red stamps. Market report and much valuable information sent free.

Northwestern Hide and Fur Co.,

2254

MINNEAPOLIS, MINN.

NORTHERN PACIFIC RAILWAY  
TIME TABLE.

## MAIN LINE.

Arr.	Arr.		Lv.	Lv.
11 00a	1 30p	Winnipeg	1 05p	9 30p
7 55	12 01a	Morris	2 32p	12 01a
5 15	11 09	Emerson	3 23p	2 45
4 15	10 55	Pembina	3 37p	4 15
10 20p	7 30	Grand Forks	10 05p	7 05a
1 15	4 05	Winnipeg Junc	10 45p	10 30p
	7 30	Duluth	8 00a	
	8 30	Minneapolis	6 40	
	8 00	St. Paul	7 15	
	10 30	Chicago	9 35	

## MORRIS-BRANDON BRANCH.

Mon., Wed., Fri. Tues., Thurs., Sat.

10 30 am	D	Winnipeg	A	4 00 pm
12 15 pm	D	Morris	A	2 20
1 18		Roland		1 20
1 38		Rosebank		1 07
1 50		Miami		12 53
2 25		Altamont		12 21
2 43		Somerset		12 00
3 40		Greenway		11 10 am
3 55		Baldur		10 56
4 19		Belmont		10 35
4 37		Hilton		10 17
5 00		Wawanesa		9 56
5 23		Rounthwaite		9 34
6 00 pm	A	Brandon	D	9 00 am

Taking effect Tuesday, Dec. 7th. Direct connection at Morris with train No. 103, westbound, and train No. 104 eastbound.

## PORTAGE LA PRAIRIE BRANCH.

Lv.		Arr.
4.45 p.m.	Winnipeg	12.35 p.m.
7.30 p.m.	Portage la Prairie	9.30 a.m.

C. S. FEE, Gen. Pass. Agt., St. Paul. H. SWINFORD, Gen. Agt., Winnipeg.

**Printers  
Litho  
Engraving  
Co.**

**Winnipeg,  
Man.**

## PATENTS.

If you have any business before the U.S. Patent Office I will be glad to take the matter in hand for you, assuring you that I have every facility for securing allowance of applications in the quickest possible time consistent with good work. Send a drawing or photo together with description of your idea for opinion as to patentability.

BENJ. F. FUNK,

611 7TH ST. N. W., WASHINGTON, D. C.

2302



We might have triumphed over Miss Pole, who had professed such bravery until she was frightened; but we were too glad to perceive that she shared in the weaknesses of humanity to exult over her; and I gave up my room to her very willingly, and shared Miss Matty's bed for the night. But before we retired, the two ladies rummaged up, out of the recesses of their memory, such horrid stories of robbery and murder that I quite quaked in my shoes. Miss Pole was evidently anxious to prove that such terrible events had occurred within her experience that she was justified in her sudden panic; and Miss Matty did not like to be outdone, and capped every story with one yet more horrible, till it reminded me, oddly enough, of an old story I had read somewhere, of a nightingale and a musician who strove one against the other which could produce the most admirable music, till poor Philomel dropped down dead.

One of the stories that haunted me for a long time afterwards was of a girl who was left in charge of a great house in Cumberland on some particular fair day, when the other servants all went off to the gayeties. The family were away in London, and a pedler came by, and asked to leave his large and heavy pack in the kitchen, saying he would call for it again at night; and the girl (a game-keeper's daughter), roaming about in search of amusement, chanced to hit upon a gun hanging up in the hall, and took it down to look at the chasing; and it went off through the open kitchen door, hit the pack, and a slow dark thread of blood came oozing out. (How Miss Pole enjoyed this part of the story, dwelling on each word as if she loved it!) She rather hurried over the further account of the girl's bravery, and I have a confused idea that somehow, she baffled the robbers with Italian irons, heated red-hot, and then restored to blackness by being dipped in grease.

We parted for the night with an awe-stricken wonder as to what we should hear of in the morning—and, on my part, with a vehement desire for the night to be over and gone: I was so afraid lest the robbers should have seen, from some dark lurking-place, that Miss Pole had carried off her plate, and thus have a double motive for attacking the house.

But until Lady Glenmire came to call next day, we heard of nothing unusual. The kitchen fire-irons were in exactly the same position against the back door as when Martha and I had skillfully piled them up, like spillikins, ready to fall with an awful clatter if only the cat had touched the outside panels. I had wondered what we should all do if thus awakened and alarmed, and had proposed to Miss Matty that we should cover up our faces under the bed-clothes, so that there should be no danger of the robbers thinking that we could identify them; but Miss Matty, who was trembling very much, scouted this idea, and said we owed it to society to apprehend them, and that she should certainly do her best to lay hold of them and lock them up in the garret till morning.

When Lady Glenmire came, we almost felt jealous of her. Mrs. Jamieson's house had really been attacked; at least there were men's footsteps to be seen on the flower borders, underneath the kitchen windows, "where nae man should be," and Carlo had barked all through the night, as if strangers were abroad. Mrs. Jamieson had been awakened by Lady Glenmire, and they had rung the bell which communicated with Mr. Mulliner's room in the third story, and when his night-capped head had appeared over the bannisters, in answer to the summons, they told him of their alarm, and the reasons for it; whereupon he retreated to his

bedroom, and locked the door (for fear of draughts, as he informed them in the morning), and opened the window, and called out valiantly to say, if the supposed robbers would come to him he would fight them; but, as Lady Glenmire observed, that was but poor comfort, since they would have to pass by Mrs. Jamieson's room and her own before they could reach him, and must be of a very pugnacious disposition indeed if they neglected the opportunities of robbery presented by the unguarded lower stories, to go up to a garret, and there force a door in order to get at the champion of the house. Lady Glenmire, after waiting and listening for some time in the drawing-room, had proposed to Mrs. Jamieson that they should go to bed; but that lady said she should not feel comfortable unless she sat up and watched; and, accordingly, she packed herself warmly on the sofa, where she was found by the housemaid, when she came into the room at six o'clock, fast asleep; but Lady Glenmire went to bed, and kept awake all night.

When Miss Pole heard of this, she nodded her head in great satisfaction. She had been sure we should hear of something happening in Cranford that night; and we heard. It was clear enough they had first proposed to attack her house; but when they saw that she and Betty were on their guard, and had carried off the plate, they had changed their tactics and gone to Mrs. Jamieson's, and no one knew what might have happened if Carlo had not barked, like a good dog as he was!

Poor Carlo! his barking days were nearly over. Whether the gang who infested the neighborhood were afraid of him, or whether they were revengeful enough, for the way in which he had baffled them on the night in question, to poison him; or whether, as some among the more uneducated people thought, he died of apoplexy, brought on by too much feeding and too little exercise; at any rate it is certain, that two days after this eventful night, Carlo was found dead, with his poor little legs stretched out stiff in the attitude of running, as if by such unusual exertion he could escape the sure pursuer, Death.

We were all sorry for Carlo, the old familiar friend who had snapped at us for so many years; and the mysterious mode of his death made us very uncomfortable. Could Signor Brunoni be at the bottom of this? He had apparently killed a canary with only a word of command; his will seemed of deadly force; who knew but what he might yet be lingering in the neighborhood willing all sorts of awful things!

We whispered these fancies among ourselves in the evenings; but in the mornings our courage came back with the daylight, and in a week's time we had got over the shock of Carlo's death; all but Mrs. Jamieson. She, poor thing, felt it as she had felt no event since her husband's death; indeed Miss Pole said, that, as the Honorable Mr. Jamieson drank a good deal, and occasioned her much uneasiness, it was possible that Carlo's death might be the greater affliction. But there was always a tinge of cynicism in Miss Pole's remarks. However, one thing was clear and certain—it was necessary for Mrs. Jamieson to have some change of scene; and Mr. Mulliner was very impressive on this point, shaking his head whenever we inquired after his mistress, and speaking of her loss of appetite and bad nights very ominously; and with justice, too, for if she had two characteristics in her natural state of health they were a facility for eating and sleeping. If she could neither eat nor sleep, she must be indeed out of spirits and out of health.

Lady Glenmire (who had evidently taken very kindly to Cranford) did not like

## HOME WORK FOR FAMILIES.

We want the services of a number of families to do work for us at home, whole or spare time. The work we send our workers is quickly and easily done, and returned by parcel post as finished. Pay \$7 to \$10 per week. For particulars ready to commence send name and address. THE S. A. SUPPLY CO., BOX 265, LONDON, ONT.



"Wilson's Common Sense Ear Drums" relieve all conditions of Deafness and Head Noises, where Medical skill fails. The only Scientific Aural Sound Conductor in the world. Safe to wear, comfortable, invisible, no dangerous wire or metal attachment. Recommended by physicians. Write for book free. **Karl K. Albert,**

sole Western Agent, P.O. Box 589, Dept. G., Winnipeg, Man.

## DR. BARNARDO'S HOMES.

The managers of these institutions invite applications from farmers and others for boys and youths who are being sent out periodically, after careful training in English homes. The older boys remain for a period of one year at the Farm Home at Russell, during which time they receive practical instruction in general farm work before being placed in situations. Boys from eleven to thirteen are placed from the distributing home in Winnipeg. Applications for younger boys should be addressed to the Resident Superintendent—115 Pacific Avenue, Winnipeg, or P. O. Box, 970—and for older boys, possessing experience in farm work, to Manager, Dr. Barnardo's Farm Home, Barnardo, Man. (1927)

# The MANITOBA.



MANITOBA HOTEL, WINNIPEG

I am seeking your patronage. You can have mine; I pay highest cash price for any of your Dairy Produce—

## RECIPROCATE

F. W. SPRADO,  
MANAGER.

the idea of Mrs. Jamieson going to Cheltenham, and more than once insinuated pretty plainly that it was Mr. Mulliner's doing, who had been much alarmed on the occasion of the house being attacked, and since had said, more than once, that he felt it a very responsible charge to have to defend so many women. Be that as it might, Mrs. Jamieson went to Cheltenham, escorted by Mr. Mulliner; and Lady Glenmire remained in possession of the house, her ostensible office being to take care that the maid-servants did not pick up followers. She made a very pleasant-looking dragon; and, as soon as it was arranged for her to stay in Cranford, she found out that Mrs. Jamieson's visit to Cheltenham was just the best thing in the world. She had let her house in Edinburgh, and was for the time houseless, so the charge of her sister-in-law's comfortable abode was very convenient and acceptable.

Miss Pole was very much inclined to install herself as a heroine, because of the decided steps she had taken in flying from the two men and one woman, whom she entitled "that murderous gang." She described their appearance in glowing colors, and I noticed that every time she went over the story some fresh trait of villainy was added to their appearance. One was tall—he grew to be gigantic in height before we had done with him; he, of course, had black hair—and by-and-by it hung in elf-locks over his forehead and down his back. The other was short and broad—and a hump sprouted out on his shoulder before we heard the last of him; he had red hair—which deepened into carotry; and she was almost sure he had a cast in the eye—a decided squint. As for the woman, her eyes glared, and she was masculine looking—a perfect virago; most probably a man dressed in woman's clothes: afterwards we heard of a beard on her chin, and a manly voice and stride.

If Miss Pole was delighted to recount the events of that afternoon to all inquirers, others were not so proud of their adventures in the robbery line. Mr. Hoggins, the surgeon, had been attacked at his own door by two ruffians, who were concealed in the shadow of the porch, and so effectually silenced him that he was robbed in the interval between ringing his bell and the servant's answering it. Miss Pole was sure it would turn out that this robbery had been committed by "her men," and went the very day she heard the report to have her teeth examined, and to question Mr. Hoggins. She came to us afterwards; so we heard what she had heard, straight and direct from the source, while we were yet in the excitement and flutter of the agitation caused by the first intelligence; for the event had only occurred the night before.

"Well!" said Miss Pole, sitting down with the decision of a person who has made up her mind as to the nature of life and the world (and such people never tread lightly, or seat themselves without a bump), "well, Miss Matty! men will be men. Every mother's son of them wishes to be considered Samson and Solomon rolled into one—too strong ever to be beaten or discomfited—too wise ever to be outwitted. If you will notice, they have always foreseen events, though they never tell one for one's warning before the event happens. My father was a man, and I know the sex pretty well."

She had talked herself out of breath, and we should have been very glad to fill up the necessary pause as chorus, but we did not exactly know what to say, or which man had suggested this diatribe against the sex; so we only joined in generally, with a grave shake of the head, and a soft murmur of "They are very incomprehensible, certainly!"

(To be Continued.)

### A Free Slave.

She said to him, her lover;  
"I would not hold you—no!  
If once the dream seemed over,  
If once you wished to go,  
You're free at any season,  
At any moment—free!"  
"But that is just the reason  
You hold me fast," said he.  
—Madeline S. Bridges, in Century.

### Saved His Money.

In Minneapolis, Minnesota, there lived for many years, and let us hope still lives, a gentleman named Jeremiah Coughlin, better known as Jerry Coughlin. For years and years and years he was a conductor on the Chicago, Milwaukee and St. Paul Railroad. Jerry was one of those conductors who would hold the train a few seconds for the nearly-dead-with-exhaustion travelling man who had run all the way to the depot, heavy grips in hand in order to "make time," only to see the train ready to pull out and he a hundred feet away. And Jerry, well, he'd stand by, watch in hand, and call out in a cheery way, "I'll wait for you," and smilingly help carry the satchels into the train. Up in Heaven there are Pullman car reserved seats for such conductors. By and by Jerry's savings accumulated until he had become a rich man, and was elected president of the Irish-American bank of Minneapolis. Still he kept his train. Told the writer "he'd die if he didn't." One night on the smoker Jerry made a statement that still lingers in my memory. "My boy, save five dollars a month, only five dollars if need be, but keep it up and you'll be mighty glad of it when the gray hairs of old age come. It always hurts my feeling to see old men do day labor, sawing wood for a meal, and such work. Save your money when you are young to take care of you in old age. How did I get to be comfortably well off? Saved my money."

### Sponges.

Sponges are the skeleton or framework of a kind of animal or vegetable growth which is found at the bottom of shallow seas. When first brought to the surface they are made to lie in the sun until all the soft and fleshy substance is dried and decomposed. They are then beaten in fresh running water till everything is washed out of the fibrous framework—this is the sponge which we buy and use. The quality of sponges varies with the locality in which they are found. Some come from Cuba and the coasts of Florida, but the best are found in the Eastern Mediterranean, on the coast of Egypt, and about the Grecian Archipelago. Good sponges are dark-colored—that is, distinctly brown, and not pale yellow. The pretty pale color is obtained by bleaching the sponge with vitriol, after which it is neither so velvety nor so durable. If a sponge is allowed to become slimy it may be renewed by being left to soak for a few hours in a strong solution of salt and water, or ammonia, or borax and water. The use of soap with a sponge soon makes it sticky and nasty.

David Clark, Treherne:—"I received the ten great books premium with The Farmer and am greatly pleased with them."

C. D. Bemrose, Neepawa:—"The matter The Nor'-West Farmer contains is good, and every farmer should subscribe and read it."

The Best...

**Photographs**  
ARE MADE BY  
**Steele & Co.**  
WINNIPEG.

REMEMBER THAT WHEN YOU ARE  
IN THE CITY.

**DICK, BANNING & CO.**  
WINNIPEG.

Dealers in Pine, Cedar, Fir, Spruce  
Oak and Basswood

**LUMBER**

of all kinds, Pine and Cedar Shingles,  
Lath, Sash, Doors, etc.

Office and Yard, Opp. C. P. R. Station.  
Telephone 239. Post Office Box 1230.

SEVERAL GOOD FARMS

1869 for sale at reasonable rates.

**MRS. R. CARR**

HAS RE-OPENED

**The American Art Gallery**

284 Main Street,

OPPOSITE THE MANITOBA HOTEL.

Where she will be pleased to meet all her old patrons as well as many new ones.

All negatives taken in the past have been carefully preserved, from which we can fill orders at any time. Don't forget the number—

**284 MAIN STREET.**  
2183

GET YOUR

**Photographs**

AT

**FOXALL'S**

CITY ART MUSEE,

Fleming Block, BRANDON.

TRY...

**GRAY**

—FOR—

**YOUR PHOTOS.**

STUDIO, OVER "CHEAPSIDE,"

574½ MAIN STREET, WINNIPEG.

Good Work at Reasonable Prices.



### These Good Old Times.

This is an extract from a sermon by Rev. H. C. Trumbull, of Philadelphia: It is said to be an authenticated fact that godly old Jonathan Edwards of Massachusetts wrote a letter to a friend in the West Indies proposing to send a hogs head of New England rum in barter for an able-bodied negro slave. Still later, the Rev. Dr. Nathan Strong, pastor of my old home church in Hartford, was, as I have been told, the owner of a distillery while in the active pastorate. Not being so successful a distiller as he was a pastor, he failed in the rum business, and a civil judgment was rendered against him accordingly. To evade the sheriff's execution, he was compelled to shut himself in the parsonage week days, but when Sunday came he moved out in solemn dignity with his cocked hat and knee-breeches, and passed over to the church to preach as usual. No civil process could disturb him on Sundays. His conscience does not seem to have disturbed him on the distillery question any day of the week.

### Self-Reliance.

Henry Ward Beecher used to tell this story of the ways his teacher of mathematics taught him to depend upon himself:—

"I was sent to the blackboard, and went, uncertain, full of whimpering.

"That lesson must be learned," said my teacher, in a very quiet tone, but with a terrible intensity. All explanations and excuses he trod under foot with utter scornfulness. 'I want that problem; I don't want any reasons why you haven't it,' he would say.

"I did study it two hours."

"That's nothing to me. I want the lesson. You need not study it at all, or you may study it ten hours, just to suit yourself. I want the lesson."

"I was tough for a green boy, but it seasoned me. In less than a month I had the most intense sense of intellectual independence and courage to defend my recitations.

"One day his cold calm voice fell upon me in the midst of a demonstration, 'No!'

"I hesitated, then went back to the beginning, and on reaching the same point again, 'No!' uttered in a tone of conviction, barred my progress.

"The next, and I sat down in red confusion.

"He, too, was stopped with 'No!' but went right on, finished, and as he sat down was awarded with 'Very well.'

"Why," whimpered I, 'I recited it just as he did, and you said 'No!'

"Why didn't you say 'Yes,' and stick to it? It is not enough to know your lesson; you must know that you know it. You have learned nothing till you are sure. If all the world says, 'No!' your business is to say 'Yes,' and prove it.—Good Stories.

### Sweet Girl!

Mabel—Do you think the war will have any effect upon the price of candies?

Jack—Wouldn't be surprised if it did. They say everything'll go up.

Mabel—Then, why don't you get a supply now?—Chicago News.

Joseph H. Price, Fort a la Corne, in subscribing, says:—"The farmer in this country who does not take The Nor'-West Farmer is standing in his own light."

### Throneroom of Spain.

The throne-room of Spain is a magnificent apartment of crimson and gold, with colossal mirrors and a chandelier of rock crystal that is considered the finest example of the kind in the world. Under the gorgeous canopy are two large chairs handsomely carved and gilded and upholstered in crimson brocade. Those are the thrones of Spain, where the boy king and queen regent sit on occasions of ceremony. Sometimes the daughters stand beside their mother, when it is proper for all the royal family to receive the court. —International Magazine.

### The Kind of Genius Needed.

"There," said a neighbor, pointing to a village carpenter, "there is a man who has done more good, I really believe, in this community than any other person who ever lived in it. He cannot talk very much in public, and he does not try. He is not worth \$2,000, and it is very little he can put down on subscription papers; but a new family never moves into the village that he does not find it out, and give them a neighborly welcome and offer them some service. He is on the lookout to give strangers a seat in his pew at church. He is always ready to watch with a sick neighbor, and look after his affairs for him. I believe he and his wife keep house plants in winter mainly that they may be able to send little bouquets to friends and invalids. He finds time for a pleasant word to every child he meets, and you'll always see them climbing into his one-horse wagon when he has no other load. He has a genius for helping folks, and it does me good to meet him in the streets."

# Massey-Harris Co., Ltd.,

The Largest Manufacturers of High Class Farm Machinery under the British Flag.


**AGENTS AT ALL LEADING POINTS**

**SETTLER'S OUTFITS A SPECIALITY.**

**MASSEY-HARRIS CO. LTD.**

**FARM IMPLEMENTS.**

**MARKET SQ. WINNIPEG, MAN.**

TORONTO, ONT. CAN.

BRANTFORD.

## IT WILL PAY EVERY FARMER

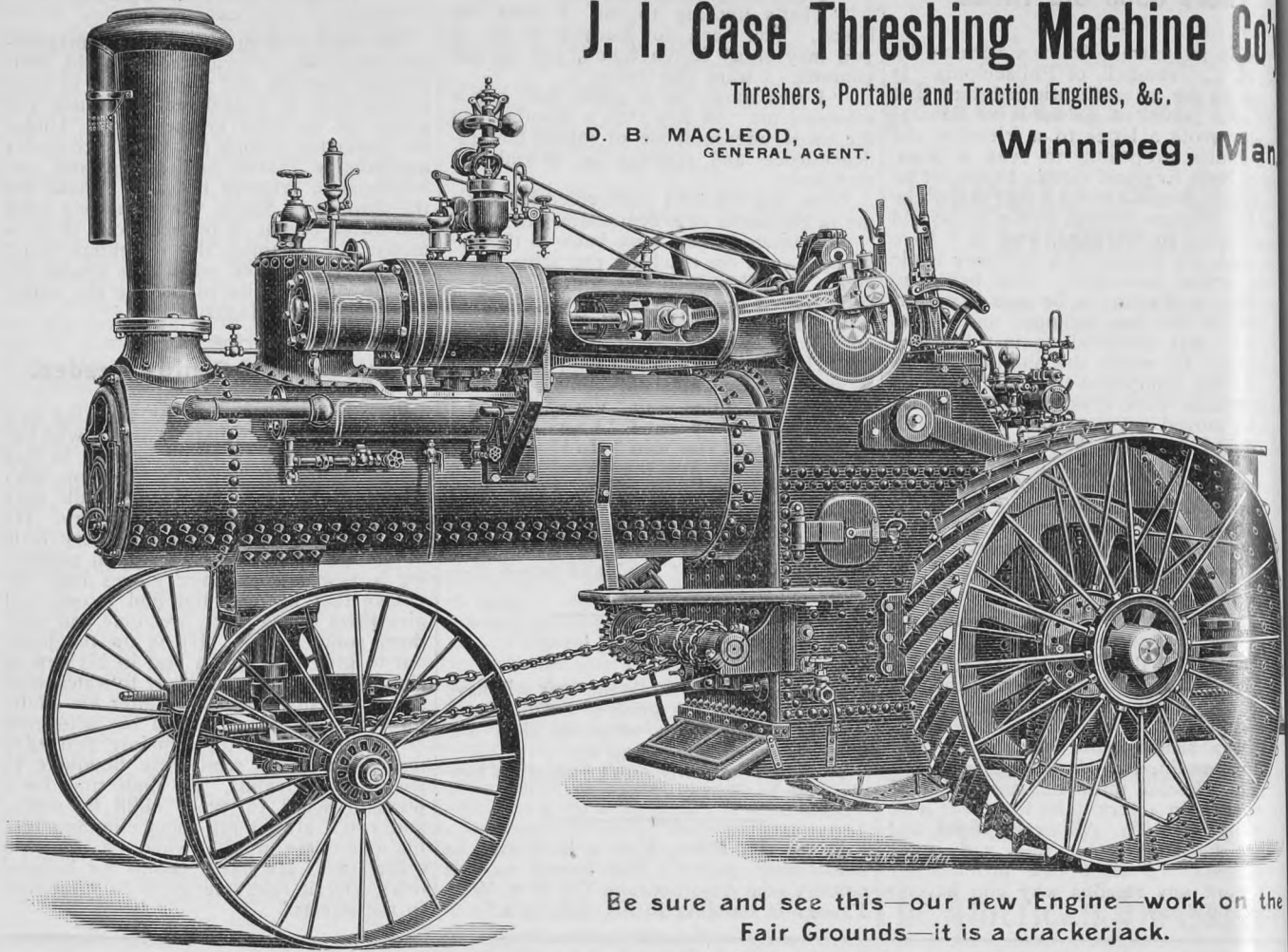
To use a MASSEY-HARRIS CULTIVATOR, the Most Perfect Tool of its kind, TEN THOUSAND NOW IN USE.

# J. I. Case Threshing Machine Co.

Threshers, Portable and Traction Engines, &c.

D. B. MACLEOD,  
GENERAL AGENT.

Winnipeg, Man.



Be sure and see this—our new Engine—work on the Fair Grounds—it is a crackerjack.

## The Ant and Its Ways.

Sir John Lubbock, one of England's greatest naturalists, has given very special attention to the habits of ants, and in a recent lecture gave much interesting information about them. Sir John commenced by describing his method of observation, and said that he had been able to make the ants under investigation so comfortable that they lived as nearly as possible under natural conditions. He had kept many for several years, two queens had reached the age of fifteen years, and these were by far the oldest insects on record.

Ants watched over their young with a skill and tenderness which not even the Royal British nurses could excel. They never quarrelled, and no one had ever seen a dispute between two ants belonging to the same nest, yet they were very brave and defended their homes like little six-legged Leonidas. Unlike the so-called higher animals, they never turned against a weak or wounded companion. One of his ants had come into the world a cripple, but she was carefully tended and fed for months by her companions.

All the ants of a community knew one another and they would not tolerate a stranger, even of the same species, in the nest. He had separated a nest into halves and found that even after eighteen months they still recognized their old companions. They did not, however, show any pleasure or surprise at meeting them again. It had been suggested that ants recognized one another by a sort of password, but this was not the case.

He had made fifty ants quite "drunk and incapable," and then put them near

a nest to which twenty-five of them belonged. These twenty-five were carried back into the nest, where, no doubt, they slept off the effects of their involuntary debauch; the other twenty-five were thrown into the moat which surrounded the ants' park.

The senses of ants differed in many respects from those of humanity. They probably heard sounds which were inaudible to us, and saw the ultra-violet rays which were invisible to us. Some species kept slaves, and one kind had lost the instinct of feeding and would starve if left by themselves, even if food were provided. He had found, however, that they would live for weeks if they had a slave for an hour a day to feed and clean them.

Several species kept aphides which they milked like cows, and in the autumn they collected the eggs of the aphides and kept them all through the winter, although they were of no use, and the young aphides hatched from them gave none of the sugary fluid till the following May or June, so that the ants showed more thrift and forethought than many human beings.

Their instincts, though so wonderful, were very limited, and yet when ants were watched building their nest, feeding their young, defending their homes, making roads, tending their domestic animals, and, in some cases, their slaves, it was difficult to suppose that they were unconscious automata, and though their mental powers were, no doubt, greatly inferior to ours, the difference was probably not so much in kind as in degree.

## TO CURE A COLD IN ONE DAY,

Take Laxative Bromo Quinine Tablets. All Druggists refund the money if it fails to cure. 25c. [2250]

## The Ever Powerful Pie.

"You here again?" said the young wife at the back door.

"No, mum, not again," said the tramp, removing what remained of his hat.

"Why, you were here three days ago, and I gave you a piece of my pie!"

"You are mistaken, mum. That was my brother. Poor man, he's in the hospital."—Yonkers Statesman.

There are no better friends than good books. Those which give us help when we are most in need. If tired and worn with the day's toil, or cares and vexations, we can go to these friends who are always ready with words of cheer. They never change, are always the same. We can rely upon them to take us away out of our troubles, into pleasant places, and among pleasant people, who will entertain us so bountifully that we will for a time forget our own narrow sphere of life and its ills and sorrows.

When flies become troublesome they can always be expelled by a very simple mixture. A half teaspoonful of black pepper, finely ground, should be mixed with double the quantity of brown sugar, the compound to be moistened with cream. The flies will generally eat greedily of this mixture if placed where they can easily reach it, but it will be their last meal, for the least taste of it is to a fly rank poison. If watched, they will often be seen to drop dead within a few feet of the plate which they have just left, and some of the healthiest eaters do not live to leave the plate.